

Volker Boehme-Neßler

Digitising Democracy

On Reinventing Democracy in the Digital
Era – A Legal, Political and Psychological
Perspective

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Preface

Digitalisation is changing everything. At the same time, it is not a force of nature that we are mercilessly exposed to. Digitalisation can be shaped both politically and legally. These are the two basic ideas that this book explores.

Is digitalisation good or bad for democracy? That is still very much an open question. Digitalisation has the potential to improve and deepen democracy. However, digitalisation also poses a threat to democracy. It challenges democracy. More and more evidence shows that digitalisation is pushing classical parliamentary democracy to its very limits. In the digitalised world, democracy no longer simply functions as it has in the past.

This does not mean waving goodbye to democracy in the age of digitalisation—but we need to reinvent democracy to a large extent. Why this is the case and how it could work are the central themes of this book.

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The book is dedicated to my son Thao—what would I do without you?

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Volker Boehme-Neßler

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Chapter 1

Digitalisation: The End of Democracy?



Whilst digitalisation is ultimately a technological phenomenon, it is also much more than that: digitalisation has a cultural aspect that is changing all areas of society. Digitalisation is also posing a range of challenges to democracy itself.

1.1 The End of Democracy? Digitalisation and Democracy

The end of democracy has often been heralded or foretold. Recent decades have seen a cascade of sceptical pronouncements and prophecies about the state of democracy.¹ Even if some of these are far-fetched or exaggerated,² democracy is under considerable pressure to change around the world. There are many reasons for this. It is clear that globalisation is having—and will continue to have—a major impact on democracy. Just as important, however, are cultural developments and processes of social modernisation. This process affects not only individual manifestations and specific details, but also the very foundations of the democratic ideal and the structures of democratic systems. Is this leading to an erosion of democracy? Or are these normal processes of adjustment that will not destabilise the democratic system?

That democracy is changing is, of course, nothing new. Modern representative democracy is a far cry from the original *agora democracy* of Greek antiquity. Democratic forms and processes are, by their very nature, constantly developing. They need to be able to function even under changing political, economic or cultural conditions. What matters is not the concrete form of democracy, but rather that the

¹Norris (2001), p. 3 f. provides an overview of the discussion in political science.

²Norris (2001), p. 63 ff. and passim with further citations, arrives at highly differentiated results on the basis of extensive empirical material. There is no empirical evidence of a general erosion of democracy.

core idea of democracy continues to be realised: that all state authority is derived from the people.

The digitalisation of the world is having a profound impact. Digital technology is changing (almost) everything. It is therefore highly likely that digitalisation will also challenge and change democracy. What does a *digitalised democracy* look like? How are digital technology and the Internet changing the foundations of democracy and the basic structures of democratic systems? The Internet is profoundly changing societies and people's everyday lives. What does this mean for democracy? Is the Internet an opportunity for democracy? Or does it threaten the very foundations of democracy? Examples and arguments can be found for both anticipated scenarios—optimistic and pessimistic.

Is this the end of democracy *per se*? Unlikely. But it is the end of democracy as we know it. There is much to suggest that the Internet and digitalisation will change democracy in very fundamental ways. What democracy looks like in the Internet age remains to be seen. But whatever happens, democracy needs to reinvent itself.

1.2 Digitalisation. Technology and Culture

1.2.1 *Technology. Digitalisation and Networking*

Digital technology is based on a simple idea: all information can be represented by the digits 1 and 0.³ Even the most varied, multidimensional information can be represented by complex sequences of multiple series of numbers. Because computers can only work with the digits 0 and 1, the binary system is used to represent information with numbers. Digital technology therefore makes all information computer compatible. That means that even the most complex information can be represented by numbers and stored and processed electronically. This is the technological basis of the knowledge and information society.

However, the knowledge and information society also rests on another pillar: the networking of computers.⁴ The global networking of computers is not only revolutionising information processing and storage, but also the exchange of information. In any case, the Internet—the global network of networks—opens up the potential to easily exchange information around the world.⁵ That is a technological revolution. But it is much more than that: digitalisation has far-reaching political, economic, social and psychological consequences. After all, digitalisation is omnipresent and shapes—and arguably dominates—the (post)modern world.⁶

³This binary system goes back to Leibniz at the end of the seventeenth century. On the deeper roots of digitality, see Wenzel (2003), p. 25 f. with further citations.

⁴Dertouzos (1999), p. 465, speaks descriptively of pillars.

⁵For a detailed history of the development of the Internet, see Hafner and Lyon (2000).

⁶For a detailed critique of this, see Landow (2006), p. 43.

Digitalisation and the Internet are technologies that are changing the world. They influence people's behaviour, thinking and psyche.⁷ The Internet will lead to a change in thinking habits, the consequences of which we can barely begin to assess. The Internet and digitalisation can therefore also be understood as closely related complexes that are not only changing the world, but also the perception of the world, making digitalisation not only a technological, but also a cultural phenomenon.

1.2.2 *The Cultural Core of Digitalisation*

Digitalisation as a cultural phenomenon: we can assume that this is likely to have far-reaching effects on democracy. After all, democracy is an important part of culture. How will democracy change when and as a consequence of its encounter with digitalisation?

Technologically speaking, binarity and networking are at the core of digital technology. Yet in *cultural* terms, only material that is created on this technical basis will have an impact. So what is the cultural core of digitalisation?

A prominent feature of digital culture is its *boundlessness*. With digital technology, crossing a wide range of boundaries is easy. Boundaries are therefore becoming less important. History tells us that boundaries and borders have always played a major role. This process of digitally removing boundaries is therefore a cultural revolution that is difficult to overestimate. What does it mean for democracy if the significance of boundaries becomes relativised?

It is almost a cliché to say that *multimediality* lies at the core of digital culture. Digital technology makes it possible to combine a wide variety of media in a previously inconceivable manner. Multimediality in itself is of course not a new phenomenon. Even the early operas were multimedia events that appealed to several senses at once. What is new, however, is the technical ease with which multimedia can be generated thanks to digital technology—more than anything else, this is the origin of the deluge of images so characteristic of the modern world. The deluge of images—how is it affecting democracy?

A key characteristic of the digital culture is its *virtual nature*. It puts pressure on two major constants of the living world: matter and time. Digital technology works with fleeting stimuli and creates worlds of its own that have significance for people's everyday lives. This relativises the meaning of material things. The same applies to time. Digital technologies allow a significant asynchronicity of life and work, which influences the meaning of time and its role as a metronome of social life. What does this mean for modern democracy?

Similarly, *interconnectedness* is not a new phenomenon. On the contrary: as the natural sciences have pointed out, networking is a principle that has shaped the development of the world and its current state. The history of ideas has also long

⁷The American psychologists Turkle (1999) and Wallace (2001) were pioneering here.

regarded networking as an important law that can explain many developments. However, digital technology makes networking much easier. It enables potentially limitless networking of various types of content, creating not only a new quantity of networked content, but also a new quality of content.

So: where is democracy headed in view of the digital revolution's ubiquity and dissolution of boundaries, its multimodality, virtuality and networking? To put it succinctly: what does an unbounded, multimodalised, virtualised and networked democracy look like?

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Chapter 2

Boundary-Free. The Core of Digitalisation



Digitalisation is reducing the significance of borders and boundaries that previously structured the world. This is not without consequences for nation states, which are still very much typified by geographical borders. What does this mean for democracy? After all, democracy and the nation state are linked at a practical level.

2.1 The End of Boundaries?

The ubiquity of digital information is dissolving boundaries across multiple dimensions. At the very least, we can discern spatial-geographical, social and political aspects of the dissolution of boundaries.

2.1.1 *Physical Dissolution of Boundaries*

The physical dimension of the dissolution of boundaries is clearest: spatial, physical and geographical borders are increasingly irrelevant in the digitalised world. The process of dissolving boundaries is particularly advanced at the economic level¹: the economy is becoming ever more denationalised.² Digitalisation and the Internet have led to far-reaching de-materialisation in the global economy, which has had a serious impact: borderless markets are increasingly shaping the structure of the global economy. Above all, services are no longer location-bound, as they were in the past. They can be produced, stored, traded and consumed in digital form at any

¹For a detailed account of the dissolution of boundaries through economic globalisation, see Schroer (2006), p. 195 ff. with further citations.

²Zürn (1998a), p. 87 ff., with extensive empirical material.

location. This has transformed the service sector—until the 1990s regarded as a primarily domestic economic phenomenon—into a driver of globalisation and the dissolution of boundaries.³ Overall, the trend is clear: national economies and domestic markets are tending to become less important.⁴ National, single-state economic policy is therefore increasingly coming up against its limits.⁵

The de-materialisation and dissolution of boundaries within the world economy⁶ is having far-reaching implications for the law, which is still strongly geared towards national borders. This problem is particularly apparent—not to mention highly sensitive—in tax law.⁷ Traditional tax law is based on the concept of physical presence. Material, physically tangible points of reference are central for the taxation of economic transactions. Tax liability depends, for example, on whether and where a permanent establishment exists or where a taxpayer has his or her place of residence. Even in the traditional economy, it has not always been easy to clearly identify a geographical connection for tax obligations.⁸ In electronic commerce, however, this is more or less impossible: in the digital economy, geographical space is largely irrelevant.⁹ To put it bluntly, digitalisation is leading to the erosion of the tax base of nation states.¹⁰

2.1.2 *Dissolution of Social Boundaries*

In sociological terms, territorial borders can be interpreted as an expression of social boundaries: the border is not a spatial fact with sociological effects, but rather a sociological fact that manifests itself in spatial terms.¹¹ For that reason alone, the analysis must not be limited to spatial-geographical borders. One outcome of digitalisation is that other, previously accepted and common boundaries are losing importance. Conventional distinctions are becoming blurred, especially at the social and societal level.¹² Two particularly striking developments are the emergence of transnational social spaces and the extreme flexibilisation of social relations.

³Neyer (1995), p. 292, with references to empirical studies supporting this finding.

⁴Zürn (1998a), p. 88 ff.

⁵The empirically based study by Herkenrath (2003), p. 125 ff. with further citations, provides detailed information on this topic.

⁶See Neyer (1995), p. 292 ff. with further citations.

⁷See Boehme-Neßler (2001), p. 1089 ff. with further citations.

⁸Doernberg and Hinnekens (1999), p. 104.

⁹For a more extensive and detailed account of the problems of business premises in electronic commerce, see Strunk et al. (2003), p. 47 ff. with further citations.

¹⁰Genschel and Uhl (2006), p. 99 ff. describe the policies that states are deploying to counter this development.

¹¹For a concise summary, see Simmel (1908/1968), p. 467.

¹²Because the Internet increases access to knowledge, the boundaries between experts and laypersons are also becoming blurred. Kettner (2002), p. 215, describes a striking example: in the medical

Modern forms of communication and increased migration¹³ are creating new and complex transnational social spaces.¹⁴ The social communities within them are no longer a product of physical boundaries.¹⁵ The interconnectedness of people is not based on living in a common geographical space. The social context is created by factors that are independent of physical boundaries such as career biographies, social origin¹⁶ or identity.¹⁷ In addition to international labour migration, globally operating corporations, international mass culture and mass communication and long-distance tourism are important culmination structures along which transnational social spaces are formed.¹⁸

2.1.3 *Social Psychology: The Flexible Human*

Modern information and communication technologies are decoupling gainful employment from place and time—or at least they have the potential to. This is resulting in a dissolution of boundaries among commercial enterprises.¹⁹ The boundaries between industries, between companies and suppliers, between competitors and between companies and customers are blurring.²⁰

These dissolutions of boundaries in the economic sphere have socio-psychological implications, of which we are only just starting to appreciate the full extent.²¹ The boundary between work and (other aspects of) life is becoming diffuse.²² This dissolution of boundaries is reinforced by state of being permanently available that online communication enables—and thus demands. From a time perspective, boundary-free work is often extensive and flexible work. There is no such thing as home time any more.²³ Workers are forced to adapt to these new characteristics. The flexibility of people—not only in a temporal sense—is therefore

field, doctors are increasingly dealing with patients who are well-informed from the Internet. This does not necessarily improve communication between doctor and patient, but rather can often cause problems and tensions.

¹³For a detailed account of global migration, see Opitz (2001), p. 261 f.; Schroer (2006), p. 198 f.

¹⁴Schroer (2006), p. 210.

¹⁵For a substantive account of the significance of boundaries for the constitution of social communities, see Simmel (1908/1968), p. 460 ff.

¹⁶Beck (1997), p. 55, uses the example of Africa to illustrate this with the pithy phrase: “Africa is not a continent, it is a concept.”

¹⁷Pries (1998), p. 74 f.

¹⁸Pries (1998), p. 75. See Kettner (2002), p. 211 f., on the importance of transnational television in this context.

¹⁹See Kratzer et al. (2004), p. 336 ff. with further citations.

²⁰Kratzer et al. (2004), p. 336.

²¹The work of Sennett (1998) is groundbreaking in this respect.

²²Kratzer et al. (2004), p. 343, aptly speak of the “dissolution of boundaries between work and life”.

²³Kratzer et al. (2004), p. 343.

subject to ever increasing demands. This is having sociological and psychological effects that we can barely start to assess.²⁴

2.1.4 Ubiquitous Computing: *Extreme Dissolution of Boundaries*

Extreme networking is pushing the dissolution of boundaries to its very limits: by ubiquitous computing,²⁵ by augmented realities and finally by affective computing—although not yet mature, it is already emerging in outline.

The term “ubiquitous computing” refers to the ubiquitous nature of information technology and computer performance.²⁶ In other words, this is the vision of the ubiquitous and invisible computer.²⁷ Computers are seamlessly and invisibly integrated into the environment.²⁸ To put it differently: tiny computers that are wirelessly networked with each other, that engage in further networking and communicate with each other, are “woven” into the human environment. The ubiquitous but invisible computer creates a “smart environment”.²⁹ Everyday objects in the human environment are equipped with sensors and computing capacity³⁰ so that they can communicate with each other and with people.

Ubiquitous computing is an extreme case of omnipresence and dissolution of boundaries. All conceivable information can be disseminated or requested from any conceivable location. Ultimately, the concept of the “smart” environment amounts to a complete dissolution of boundaries: the real world is linked to the virtual world.³¹ In other words, even the fundamental boundary between the real and the virtual world is increasingly dissolving. The vision of *augmented reality* is fascinating and disturbing in equal measure.³² The user’s real perception is enriched via displays with additional optically processed information generated by computers.³³ Reality

²⁴Sennett (1998), p. 57 ff., p. 99 ff. with further citations, provides a more detailed account. See also Maresch and Rötzer (2001), p. 23.

²⁵For similar development steps, see Weiser and Brown (1996), p. 1 ff.

²⁶For a substantive and influential account, see Weiser (1991), p. 66 ff. For further details see also Mattern (2003), pp. 3 ff. with further citations and Mattern (2005b), p. 40.

²⁷Mattern (2003), p. 3.

²⁸Weiser (1991), p. 66.

²⁹Roßnagel et al. (2006), p. 19 ff., speak of “the emergence of an imperceptible, intricate network that permeates many areas of life”.

³⁰Bohn et al. (2004) speak of “smart everyday objects” in this context.

³¹Roßnagel (2005), p. 71, rightly stresses that this is a completely new challenge—not only for (data protection) law.

³²Wellner (1993) coined the term “computer-augmented environments”.

³³See Kratzer et al. (2004), p. 837 ff. with further citations.

and virtual perceptions overlap.³⁴ Augmented reality is the beginning of this development.

The application scenarios for ubiquitous computing are broad.³⁵ At the moment, economic applications are at the forefront of the discussion, and that could change the foundations of the existing economy.³⁶ At the same time, the sky is the limit in terms of imagining the possibilities of ubiquitous computing.³⁷

However, the ethical,³⁸ legal³⁹ and economic⁴⁰ problems are just as varied as the possible applications. In a word: ubiquitous computing is not only the stuff of dreams, but also of nightmares.⁴¹ UC poses serious risks to privacy and⁴² informational self-determination.⁴³

2.1.5 Affective Computing: *Endless Dissolution of Boundaries*

Another boundary is dissolving: the boundary between computer technology and biology. These two innovative sectors are increasingly interlinking in a variety of ways and are becoming more and more interdependent.⁴⁴ *Affective computing*⁴⁵ is the technology that is driving this development. Affective computing (AC) is about developing computer systems that recognise, have and express emotions.⁴⁶ In a word: the goal of AC is to design computers that develop a basic emotional

³⁴Lipp (2004), p. 97 speaks of an “overlay of virtual and real”.

³⁵For details see Roßnagel (2007), p. 42 ff. with further citations.

³⁶See Langheinrich et al. (2005), p. 3 ff. with further citations, on the new economic paradigms that UC can entail.

³⁷For a detailed account see Mattern (2005a), p. 11 ff. An earlier pioneering account was Weiser (1991), p. 68 ff.

³⁸UNESCO has now become aware of the ethical problems of UC. See also UNESCO (2007).

³⁹For a broad overview of the legal problems arising, see Ernst (2005), p. 133 ff.

⁴⁰On the effects and risks of UC on the economy, see Bohn et al. (2004), p. 6, who speak succinctly of an “economy on autopilot”.

⁴¹Roßnagel (2007), p. 13 ff. with further citations. In the meantime, dangers and possible legal strategies are also being discussed at EC level. For details, see Huber (2006), p. 729 ff.

⁴²On the threat to privacy, see Langheinrich (2005), p. 329 ff.; Bohn et al. (2004), p. 6 ff. with further citations. As Roßnagel (2007), p. 112 with further citations, rightly points out, the private sphere is not the same as the American concept of *privacy*.

⁴³On the risks, see Roßnagel (2007), p. 85 ff.

⁴⁴Maresch and Rötzer (2001), p. 16.

⁴⁵For details, see Picard (2000), p. 47 ff. with further citations.

⁴⁶For general information on emotions in human-computer interaction, see Brave and Nass (2003), p. 82 ff. with further citations. The aim is to deploy the emotions to enable independent learning. See Ahn and Picard (2006).

intelligence. The first practical application scenarios are emerging,⁴⁷ which are primarily concerned with the fully automatic capture and exploitation of human emotions in various situations. This raises a number of ethical issues.⁴⁸

The dissolution of boundaries as a consequence of affective computing is just as highly charged. At first glance, only one boundary between (at least) two branches of science—biology and computer science—is dissolving. If we take a closer look, it becomes clear that AC is blurring other boundaries, too: the boundary between logic and emotion and the boundary between man and machine.⁴⁹

So is digitalisation the end of all boundaries? Or, to put it bluntly: is cyberspace boundary-free? The situation is not that simple. The real world retains its meaning even in and for cyberspace. After all, cyberspace does not exist in isolation or detached from *real life*. Connections and interactions still exist between the online and offline worlds.

Digitalisation in general and ubiquitous computing in particular enable data collection and storage to an (almost) unlimited extent. The data storage capacity of computers is still constantly increasing, with no end in sight.⁵⁰ The result is that nothing is fleeting anymore.⁵¹ Everything is (potentially) stored for an unlimited time. The boundaries that previous storage media and archiving techniques drew around individual and collective memory no longer exist.⁵² In other words: memory has become boundless. It is difficult to assess the impact that this can—and will—have. The question can only be answered if we explore the function of individual and collective forgetting.⁵³

2.1.6 *Analogue World: The Boundary of the Dissolution of Boundaries*

Cyberspace, *per se* ubiquitous, is dependent on a physical infrastructure. Without computers, servers and data cables, there is no virtual space.⁵⁴ Cyberspace needs real

⁴⁷An overview is provided by Picard (2000), p. 85 ff.; Mainzer (1999), p. 198 ff.

⁴⁸See Reynolds and Picard (2005), p. 1 ff.

⁴⁹For a brief overview, see Picard (2000), p. 113 ff.

⁵⁰However, digital storage media are also fighting against forgetting. On this problem, see Plaß (2005), p. 41 ff. with further citations.

⁵¹Also: Marx (2001), p. 158.

⁵²However, this constantly requires new problems to be resolved. On the long-term storage of electronic documents, see Hackel and Roßnagel (2008), p. 199 ff.

⁵³It would be beyond the scope of this work to pursue this exciting question further here. The studies by Halbwachs (1925/1985), p. 71 f. and passim, who developed the paradigm of collective memory—and collective forgetting—have become groundbreaking in this respect. The dialectic of memory and forgetting is an important topic in psychoanalysis. See already Freud (1942), p. 543, who speaks of a “memory trace”.

⁵⁴See also Bolter (1990), p. 119 f.

space.⁵⁵ The geography of the real world is therefore reflected in cybergeography: wealthy countries with higher levels of technical development generally have a denser and faster connection network than poorer regions.⁵⁶

The differences in the technical infrastructure are often due to geographical particularities. Sparsely populated parts of the world or small territories are—not necessarily, but very often—cut off from the technical infrastructure.⁵⁷ They are not only peripheral geographically speaking, but also in cyberspace terms. The global metropolises are also key hubs in virtual reality.⁵⁸

It is not only Internet hardware, but also its users that are bound to the physical world.⁵⁹ Even though they move without limits in virtual space, they physically reside in a specific geographical location defined by traditional borders. They are members of a certain culture, whose characteristics determine—and limit—their thinking. They live in geographically defined states and cities. This influences—and limits—their interests. The boundaries of how Internet users live and think therefore continue to play a role—and limit the dissolution of the world's boundaries by the Internet.

Another technical-cultural boundary is language. English dominates the Internet.⁶⁰ If you do not speak English, up to now⁶¹ you will have had only very limited access to the contents of the Internet.

At the same time, more or less successful political attempts seek to erect physical barriers that also have an effect in cyberspace. Authoritarian regimes in particular recoil from the opportunities for free information that the Internet offers their citizens. They are therefore trying to make access to cyberspace more difficult. Burma has banned the use of the Internet altogether; China,⁶² Singapore and some Arab states are trying to control access to unwanted websites via the servers that provide access to the Internet.⁶³

⁵⁵Goldsmith and Wu (2006), p. 50 ff. with further citations, sum it up with the concise phrase: “Why borders matter”.

⁵⁶On the reasons for this phenomenon, see Goldsmith and Wu (2006), p. 55 f. with further citations.

⁵⁷On the limits of globalisation from an economic-geographical point of view, see Ritter (2000), p. 120 ff. with further citations.

⁵⁸Bronger (2004), p. 19 ff.; 143 ff. with further citations.

⁵⁹Goldsmith and Wu (2006), p. 51 draw attention to this.

⁶⁰Everard (2000), p. 36; Goldsmith and Wu (2006), p. 50 f.

⁶¹Goldsmith and Wu (2006), p. 51 strongly advocate the thesis that the dominance of the English language on the Internet is currently weakening considerably.

⁶²For detailed information on China's restrictive Internet policy, see Harwit and Clark (2006), p. 24 ff.

⁶³Current details on the status of Internet censorship can be found at www.opennet.net (28/8/2019).

2.1.7 *Homo Geographicus*

Another limit to the dissolution of boundaries lies in human nature. Borders are an anthropological constant. Territorial behaviour—and thus the creation of boundaries—is a universal phenomenon that can be observed in a wide variety of human societies.⁶⁴ It does not seem to be acquired, it appears to be congenital.⁶⁵ To put it succinctly: man is a *homo geographicus*.⁶⁶

Boundaries fulfil important psychological functions. They are an elementary means of order and orientation for people.⁶⁷ People divide and structure their world through spaces and boundaries.⁶⁸ This can be convincingly illustrated by the example of memory. The individual memory of a person and the cultural memory of a society are dependent on a frame of reference, i.e. boundaries.⁶⁹ They are formed through interaction with others and always arise in social contexts. If the frame of reference changes, the memory is at risk. Crossing boundaries has therefore always been associated with the danger of forgetting.⁷⁰

Distinct—i.e. individually delimited—units are a necessity in social and political life.⁷¹ At first this is to be understood in physical terms: nation states define their sphere of influence and domination via geographical borders.⁷² That is why territories and borders have always played an important role in historical development.⁷³ Borders provide the clearest, most unambiguous separation possible.⁷⁴ They are therefore an important factor in establishing and maintaining order and stability in communities.⁷⁵ Territorial thinking thus helps to avoid conflicts.⁷⁶ It is not uncommon for conflicts to arise specifically over territories and border demarcations, and that is only a superficial paradox.⁷⁷

⁶⁴Eibl-Eibesfeldt (1997a), p. 455 ff. with further citations.

⁶⁵Eibl-Eibesfeldt (1997a), p. 456. This is not uncontroversial. On the controversy in behavioural research, see Eibl-Eibesfeldt (1997a), p. 456 ff. with further citations.

⁶⁶The term was coined by Sack (1997), p. 24.

⁶⁷Schlögel (2003), p. 137, sums this up succinctly: “Boundaries are the clearest thing imaginable.”

⁶⁸Eibl-Eibesfeldt (1997a), p. 479.

⁶⁹Halbwachs (1925/1985), p. 121, was also pioneering in terms of this insight.

⁷⁰Assmann (1993), p. 344 ff., who explains this in more detail using the example of *Deuteronomy*.

⁷¹On the significance of social borders, see Simmel (1908/1968), p. 467 ff.

⁷²Anderson (1996), p. 2, 189.

⁷³On the relationship between space and history, see Koselleck (2000), p. 78 ff. with further citations.

⁷⁴Schlögel (2003), p. 137.

⁷⁵Eibl-Eibesfeldt (1997b), p. 99.

⁷⁶Eibl-Eibesfeldt (1997a), p. 479 f. Schlögel (2003), p. 140, rightly points out that this was not and is not always successful.

⁷⁷See Eibl-Eibesfeldt (1997b), p. 220 ff. on the territorial function of wars.

Boundaries are not least an important factor for the stability of an individual and a society.⁷⁸ Boundary demarcation and differentiation are important instruments in identity formation. Both individuals and groups develop and define their identity, at least in part, in and through differentiation from others.⁷⁹ Identity formation through demarcation can also be observed in peoples or nations.⁸⁰

2.1.8 Culture and Dissolution of Boundaries

Closely related to this is the cultural aspect of space. Even if territoriality is an anthropological constant, it is shaped and modified in many ways by cultural influences.⁸¹ Different cultures have different ideas of space and specific methods of using it technically and artistically.⁸² This can be illustrated by a wealth of examples collected by studies comparing cultures.⁸³ The theory of the different, culture-specific distance in social everyday life is particularly well known. This theory tells us that people from different cultures maintain different distances to each other when they communicate and interact in everyday life.⁸⁴

What a culture does with geographical space depends—among other factors—on the status of its technology.⁸⁵ This can be understood in detail by relating the spatial concepts of different (high) cultures to the status of their science and technology.⁸⁶

2.1.9 New Boundaries Through Community Building

Boundaries are an anthropological constant and satisfy basic human needs.⁸⁷ It is therefore hardly surprising that new boundaries are being drawn in cyberspace. Boundary demarcations on the Internet are what matters now⁸⁸; geographical borders between nation states are no longer important. However, the significance of

⁷⁸Innis (1951), p. 64 with further citations.

⁷⁹The negative side effects of this mechanism are prejudices and aggression against “the other”.

⁸⁰Anderson (1996), p. 4.

⁸¹Eibl-Eibesfeldt (1997a), p. 468 f.

⁸²Bolter (1990), p. 99.

⁸³Eibl-Eibesfeldt (1997b), p. 154 ff., is insightful here.

⁸⁴Hall (1966), who distinguishes between contact and distance cultures, is pioneering in this respect. Eibl-Eibesfeldt (1997a), p. 476 ff. with further citations, provides critique and differentiation here.

⁸⁵Bolter (1990), p. 110 ff.

⁸⁶For details, see Innis (1951), p. 92 ff. with further citations.

⁸⁷Eibl-Eibesfeldt (1997a), p. 455 ff. with further citations.

⁸⁸Netanel (2000), p. 453 ff.

boundaries between digital networks is increasing.⁸⁹ Network architecture is creating a new kind of boundary. Technical rules and standards⁹⁰ that regulate the flow of information on the Internet are highly political in one respect: they open or close access points to networks.⁹¹

A clear trend towards “community building” can be observed on the Internet.⁹² Users come together to form Internet communities and establish rules which, among other things, also restrict or at least control access to these communities.⁹³ Many communities can be accessed without any problems. At the same time, however, numerous Internet communities severely limit their access and make it dependent on the fulfilment of certain conditions.⁹⁴ Every time a new, closed community is set up, new boundaries emerge on the Internet: virtual, but effective.

What is the relevance of virtual boundaries between different Internet communities? At first glance, one might regard the importance of virtual borders as being relatively minor. Crossing a border matters in real life because it marks the change from one culture and one legal system to another, and that can have a significant impact on the life of the person making the border crossing.

The rules of an Internet community, on the other hand, have far fewer effects on the lives of their members—at least at first glance. It seems easy to exit an Internet community and thus withdraw from the rules. In other words: the various exit options clearly limit the effectiveness of the virtual rules.⁹⁵ From this perspective, the relationship between an Internet community and its members seems to correspond to the relationship between producer and consumer in a functioning market or to the legal relationship between an association member and his or her association.⁹⁶ In each case, the influences and requirements to which one is exposed can be changed by simply changing partners.

On closer inspection, however, it becomes apparent that this comparison is substantially flawed. A different analogy is more apt: the relationship between an Internet community and its members is more like the relationship between the state and its citizens. This is because the exit options available to members of Internet communities are much more limited than they might seem at first glance. Or, in other words: switching from one community to another is harder than expected.⁹⁷ The costs of switching from one community to another are often high, even in virtual

⁸⁹Johnson and Post (1996), p. 1378 with further citations, and Reidenberg (1996), p. 917 make early reference to this.

⁹⁰For general information on technical standards, see Roßnagel (1996), p. 1181 ff.

⁹¹Reidenberg (1996), p. 917 f. with further citations, is emphatic in this regard.

⁹²For a basic discussion on community building, see Rheingold (1994), p. 141 ff.

⁹³Bös (2001), p. 390 f. with further citations, and Netanel (2000), p. 453 ff.

⁹⁴Marotzki (2004), p. 123.

⁹⁵Post (1995), pp. 29, 39, is emphatic here.

⁹⁶Lessig (1999), p. 200 f., draws attention to these parallels.

⁹⁷Lessig (1999), p. 201 f. emphasises this.

space. Why? Social capital is also accumulated in Internet communities.⁹⁸ As in real life, this accumulation also requires time, effort and constant, increasingly confidential interactions in virtual space.⁹⁹ In the meantime, more than a few communities are concerned not only with social capital, but also financial capital. In MMORPGs¹⁰⁰ real money is earned that can be lost again.¹⁰¹ In many communities an *economy* of play and fun is developing. The laboriously acquired relationships, friendships, reputation and status in a community are lost when you leave the community.¹⁰² If you leave a community, you start from scratch in your new community.¹⁰³ The more time, effort, energy and money a user has already invested in the community, the more unattractive and unrealistic the exit option appears.¹⁰⁴

Internet communities are becoming increasingly important. In the digitalised information society, they are an important means by which people network with others and thus participate in the life of the society.¹⁰⁵ The more social, economic and political life takes place within Internet communities, the more important it becomes to have access to them. The virtual boundaries between Internet communities are thus becoming increasingly important.

2.1.10 Fully Decoupled? Cyberspace and Real Life

Cyberspace does not exist in isolation from the world. On the contrary, it is embedded in the physical world.¹⁰⁶ It demarcates boundaries with virtual space—not just in technical ones, but also political and economic ones, meaning there are limits to the dissolution of boundaries.¹⁰⁷ At the same time, the boundlessness of

⁹⁸Lessig (1999), p. 202. For details on the concept of social capital, see Bourdieu (1992), p. 63 ff.; Putnam (2000), p. 19 ff.

⁹⁹Castronova (2005), p. 107 ff., who uses MMORPGs as an example to describe in detail how roles are assumed and expanded in *synthetic worlds*, how developments are accelerated or hindered and which risks exist.

¹⁰⁰*Massive multiplayer online role-playing games*. For details see Castronova (2005), p. 79 ff. with further citations.

¹⁰¹For more details, see Castronova (2005), p. 170 ff. with further citations, who speaks of “economics of fun”.

¹⁰²Lessig (1999), p. 202.

¹⁰³Lessig (1999), p. 202, points out that a new beginning in virtual space may therefore be more difficult than in actual life, for in real life a new beginning does not necessarily mean starting from scratch.

¹⁰⁴Castronova (2005), p. 208.

¹⁰⁵For a detailed account of the increasing importance of communities using the example of Internet video games, see Castronova (2005), p. 51 ff. with further citations.

¹⁰⁶Sassen (2000), p. 145.

¹⁰⁷For a detailed account using the example of the boundary-free working world, see Kratzer et al. (2004), p. 348 ff. with further citations.

cyberspace also influences the real world. Overall, the relationship between cyberspace and physical reality is a specific juxtaposition characterised by a range of interrelationships and mutual interactions. This is a concrete example of the complex mutual relationship between engineering and technology on the one hand and culture on the other. Technology develops within a specific real and cultural environment. At the same time, technology also influences reality, culture and not least the law.

2.2 The End of the Nation State?

Geographical borders are a central feature and important instrument of the modern territorial state.¹⁰⁸ For centuries, state and territory have been closely linked, especially in Europe and North America.¹⁰⁹ Does the dissolution of boundaries therefore mean the end of the state?¹¹⁰ That would be going a little too far. At the same time, the digitalisation processes outlined above are forging a rethink of the concept of state sovereignty.¹¹¹ This is not a completely novel task because the concept of (state) sovereignty has of course always been shaped by political and economic conditions and has therefore always been dynamic.¹¹²

2.2.1 The State and Geographical Borders

The modern state¹¹³ is a territorial entity and defined, not exclusively, but considerably, by its geographical borders. The fact that states are a phenomenon strongly with a strong geographical imprint is the result of historical development.¹¹⁴ The Peace of Westphalia of 1648 marks the turning point¹¹⁵: since then, the territorial

¹⁰⁸Luhmann (1998), p. 346.

¹⁰⁹From the perspective of world history, however, this is the exception. See von Trotha (2000), p. 265.

¹¹⁰The end of the state has been predicted repeatedly since the eighteenth century. On the history of this thesis, see Benz (2001), p. 223 ff. with further citations.

¹¹¹Similarly, Jayasuriya (1999), p. 431 f. with further citations. A. Hillgruber (2002), p. 1074 ff., who vehemently defends the principle of international sovereignty, perhaps excessively so.

¹¹²For a detailed account, see Zürn (1998a), p. 329 ff. with extensive citations; Sassen (1996), p. 29 ff.

¹¹³On the history of the concept of the state, see Benz (2001), p. 9 ff. with further citations.

¹¹⁴Schilling (1994), p. 18. Held et al. (1999), p. 32 ff. with further citations, and Schulze (1994), p. 19 ff., trace the historical development.

¹¹⁵Schöbener (2002), p. 415, describes the peace treaties of Münster and Osnabrück as a milestone in the reorganisation of Europe.

state has been the dominant model, not only in Europe, but worldwide.¹¹⁶ The state *territory*—and thus the state borders—became a constituent factor of the state.¹¹⁷

State borders have had strong socio-psychological effects both internally and externally. This precisely defined external demarcation has unleashed centripetal forces that act inwardly and without which the cohesion of the state would hardly have been possible to such an extent.¹¹⁸ External borders have had a substantial impact on the *interior* of states.¹¹⁹ The new concept of the state as a territorial state has also developed an expansive external dynamic.¹²⁰ Since the French Revolution, the secular nation state has developed into the world's dominant type of state. It has prevailed over all other forms of political organisation or arrangement.¹²¹

2.2.2 *Bit State. Statehood in a Digitalised World*

Before digitalisation, physical states—consisting of atoms—exerted power over physical territories and people. In the digitalised world, it is not atoms but bits that dominate.¹²² Physical borders¹²³ that define the atomic state have lost importance in the world of bit states.¹²⁴

The social and political space that is manifested on the Internet is not physical, but incorporeal or virtual. The power of states, on the other hand, is based on their ability to exercise (legitimate) physical force. They can ultimately use physical force to enforce compliance with their laws on their territory. In virtual space, however, this ability is *per se* considerably limited, albeit not completely lost.¹²⁵ Cyberspace is no longer about power of action that is physically enforced. More effective methods in that context are authoritative or *data-generating forms of power* which control—or attempt to control—behaviour by influencing values or setting technical standards.¹²⁶

¹¹⁶On the reasons for the power of the nation state, see Linklater (1996), p. 82 f.

¹¹⁷Ruggie (1993), p. 151.

¹¹⁸Simmel (1908/1983), p. 465.

¹¹⁹Di Fabio (2001), p. 53 f. with further citations, also emphasises the crucial function of state borders for domestic policy.

¹²⁰The concept of the territorial state reached its bloody zenith with the Nazi ideology of a “people without space”. For details of the historical loading of the concept of space, see Dreier (2002), p. 47 with extensive citations.

¹²¹Habermas (1996), p. 129.

¹²²Negroponte (1997), p. 11, coins this graphic distinction.

¹²³This term does not reference the identical term coined by Jungk (1977) to characterise the effects of nuclear technology on society and the state.

¹²⁴Luke (1998), p. 279, who also devised the graphic distinction between nuclear states and bit states.

¹²⁵Roßnagel (2002), p. 271.

¹²⁶For a basic discussion, see Popitz (1992), p. 22 ff.

2.2.3 *End of the State: Or Transformation?*

Despite all of that: there can be no question of the end of the state.¹²⁷ A closer look at developments shows us that the concept of the nation state is far from obsolete. At the same time, statehood is undergoing a process of differentiation. The loss of significance of the nation state is neither wholesale nor all-encompassing. At any rate, the state is still essential at present.¹²⁸

A wealth of comparative empirical studies shows that nation states not only continue to have the capacity to act, but also (are able to) implement national policy goals.¹²⁹ In principle, the state still has a monopoly on the use of force,¹³⁰ fiscal sovereignty and the job of making laws.¹³¹ Empirical analyses also show that the nation state still has considerable room for manoeuvre in important policy areas such as economic, social and environmental policy.¹³² Even in the globalised economy, states (sometimes) create framework conditions for multinational companies through national policies.¹³³ The reason for this seems clear: previously there has been no apparent organisational model that could provide peace, internal and external security, justice and prosperity in a similarly effective manner.¹³⁴ It is difficult to imagine that global problems such as terrorism, organised crime, or environmental destruction can be solved without the help of nation states.¹³⁵

In the absence of a serious alternative, the nation state will not disappear in the foreseeable future.¹³⁶ There is also a historical argument in favour of this: from the beginning, the development of the state has not been linear, but rather proceeded in

¹²⁷For a similar argument, see Castells (2002), p. 325; Lütz (1997), p. 491 f. with further citations.; Benz (2001), p. 226 ff. with further citations. Zürn et al. (2000), p. 324 f. Ruggie (1993), p. 142; Goldblatt et al. (1997), p. 283 f. Analysts fail to recognise this when they see the far-reaching change actually taking place in the state system: Buzan (1994), p. 97 ff.; Guéhenno (1994), p. 13 ff.; Jessop (1996), p. 68.

¹²⁸Ultimately also Randeria (2006), p. 230, but with a problematic justification.

¹²⁹For details, see Grande (2004), p. 389 ff. with further citations.

¹³⁰However, the state's monopoly on the use of force is being challenged, and potentially modified, by digitalisation and globalisation. Jachtenfuchs (2006), p. 71 ff. with further citations, discusses this problem in detail.

¹³¹Strange (1996), p. 184. Randeria (2006), p. 230, also stresses the importance of the state due to its legislative competence.

¹³²Grande (2004), p. 389 with further citations. Also Zürn et al. (2000), p. 297 ff., based on empirical case studies. However, Cerny (1995), p. 609 f., stresses the difficulties for nation states in making use of this leeway in the age of globalisation.

¹³³Castells (2002), p. 326 with further citations.

¹³⁴Reinicke (1998), p. 52 with further citations; Dicke (2000), p. 22 f. with further citations. Zürn (1998a), p. 333 f. with further citations. Similarly, Isensee (2004), marginal no. 9 with further citations. Eichenberger (1998), p. 68, emphasises the importance of the nation state for internal and external security.

¹³⁵Zürn (1998a), p. 334.

¹³⁶Schuppert (2006), p. 379, stresses that the state also remains an important actor in governance contexts—as a “gatekeeper” and “network linker”.

wave-like movements. Phases in which the power and importance of the state have grown have repeatedly alternated with situations in which the state has withdrawn or been pushed back.¹³⁷ The thesis of the end of the state is possibly a distortion of perspective¹³⁸ based on an unhistorical viewpoint.

2.2.4 *Psychology of the State*

The modern state has many functions and tasks¹³⁹—social, economic, political and cultural.¹⁴⁰ However, it is not primarily the range of its tasks that makes it indispensable. It is still needed because it has specific properties.

States have a unique institutional apparatus via which collectively binding decisions can be implemented.¹⁴¹ There is no other institution that can force the observance of laws as thoroughly as the state.¹⁴² The fact that the state represents a significant advance in terms of civilisation becomes painfully clear when one looks at failed and collapsed states, where violence is privatised and used unchecked. Human rights cease to play a role.¹⁴³

Equally important is the democratic binding power of the state: no other institution is currently better suited to organising decision-making processes in a participatory manner through its institutions and to legitimising decisions democratically.¹⁴⁴ Unlike states, supranational and international organisations as well as global political networks have deficits of democratic legitimacy.¹⁴⁵ Added to this are the hitherto unrivalled, effective financing opportunities available to states. Their tax monopoly continues to give them privileged access to financial resources.¹⁴⁶

¹³⁷Höffe (1999), p. 158, draws attention to this.

¹³⁸Similarly, Höffe (1999), p. 161.

¹³⁹On the basic function of the state, see Benz (2001), p. 100 ff. with further citations. On the tasks of the state in the economy, see Strange (1996), p. 73 ff. with further citations.

¹⁴⁰For an instructive account of the goals of government, see Zürn (1998b), p. 94 ff. with further citations.

¹⁴¹Grande (2004), p. 398; Fukuyama (2004), p. 162. On the same lines: Randeria (2006), p. 230. Max Weber (1972), p. 821 f, who regards the state's monopoly on the legitimate exercise of force as the decisive characteristic of a state.

¹⁴²Fukuyama (2004), p. 162.

¹⁴³Tetzlaff and Jakobeit (2005), p. 148 ff., who illustrate this using the example of Africa.

¹⁴⁴Grande (2004), p. 398 f.; Genschel and Uhl (2006), p. 105 f. with further citations.

¹⁴⁵An example of this is the European Union. In the Maastricht decision, the German Federal Constitutional Court stressed that the democratic legitimacy of EC decisions is also guaranteed by democracy in the nation states. For detailed information, see BVerfGE 89, 115.

¹⁴⁶Grande (2004), p. 398.

Ultimately, states fulfil a fundamental and (almost)¹⁴⁷ irreplaceable political-psychological function: social and political integration.¹⁴⁸ Hardly any other institution is as effective at providing opportunities for collective identity formation.¹⁴⁹ The political integration of citizens over a large area into an institution with capacity to act is an undisputed historical achievement of the nation state.¹⁵⁰

How social integration is possible when the nation state can no longer fulfil this function is an open question.¹⁵¹ The question of the significance of the state also and especially in cyberspace is particularly pertinent. Pure self-administration of virtual space by the actors—the *Cyberians*¹⁵²—is utopian and problematic. Practice has shown that self-government has not yet been able to function without the assistance of the state.¹⁵³ Numerous grassroots democratic experiments on the Internet and in virtual worlds have failed.¹⁵⁴ It is also unclear how community interests, fundamental rights and the protection of minorities could be enforced in a self-governing Internet.¹⁵⁵

2.3 The End of Democracy?

Historically, the development of democracy has been closely linked to the development of the state. Until now, democracy has developed primarily on the basis and within the framework of the state. And if the importance of states is declining in the age of digitalisation, what is the impact of this on democracy? Are we facing the end of democracy?

¹⁴⁷After all, there are non-governmental forms of rule outside Europe that also perform integration tasks. An example of this are the parastatal structures in some regions of sub-Saharan Africa. See von Trotha (2000), p. 269 ff. with further citations.

¹⁴⁸Similar to Habermas (1996), p. 135 ff.

¹⁴⁹On the integration capacity of states, see Dittgen (1999), p. 19 f. with further citations.

¹⁵⁰Habermas (1996), p. 110.

¹⁵¹For details, see Münch (2001), p. 179 ff.

¹⁵²Cyberians are demanding self-regulation of the Internet from different directions. The—impassioned and impressive—starting point is John Perry Barlow's *Declaration of Independence of Cyberspace*, which can be found at www.eff.org (28/8/2019). Netanel (2000), p. 410 ff. with further citations, gives an overview of the different currents of the independence movement in cyberspace.

¹⁵³Netanel (2000), p. 486; Mayer-Schönberger and Ziewitz (2006), p. 196 f. with further citations.

¹⁵⁴Mayer-Schönberger and Crowley (2006), p. 1794 ff. with further citations and instructive examples.

¹⁵⁵Netanel (2000), p. 484.

2.3.1 *Unthinkable Without Each Other? State and Democracy*

Above all else, parliamentary democracy has historically been closely linked to the development of the modern state.¹⁵⁶ In terms of democratic theory, it is not uncommon for it to be seen as analogous to the state or even directly identified with it.¹⁵⁷ The consequences for the institutional design of the state are manifold and significant,¹⁵⁸ and this is especially true of the republican¹⁵⁹ ideas of democracy in western industrial nations.¹⁶⁰ These see a close, reciprocal relationship between state, territory, nation, sovereignty, legitimacy and democracy.¹⁶¹ For them, these are the fixed points that shape the ideas of democracy.¹⁶² These ideas—inspired by Hegel¹⁶³—often have a metaphysical slant: the state is the community created jointly by all citizens that is necessary for their coexistence to be realised.¹⁶⁴ It is supported not only by the reasonable, but also emotional consensus of all citizens.¹⁶⁵ If we take this to its logical conclusion, we arrive at a true symbiosis of state and democracy; state and democracy have converged according to this view.¹⁶⁶

In this context, state borders are also the boundaries of democracy. Democracy is hard to imagine in transnational forms of organisation. The dissolution of boundaries and the end of nations would possibly be the “end of democracy”.¹⁶⁷ From this point of view, digitalisation would set a “downward spiral” in motion: states would become more powerless, first abandoning social rights, then democratic ones.¹⁶⁸

¹⁵⁶Volkman (2002), p. 579 ff. with further citations.

¹⁵⁷For a typical account, see Di Fabio (1993), p. 201f.

¹⁵⁸Preuß (1995), p. 55 f.

¹⁵⁹On the roots of republican democracy in the history of ideas, which go back to Rousseau, see Münch (1998), p.364 ff. with further citations.

¹⁶⁰See Münch (1998), p. 364 ff.

¹⁶¹McGrew (1997), p. 236 with further citations.

¹⁶²Wolf (2000), p. 177 with further citations and Volkman (2002), p. 580 ff. with further citations, give an overview of the different varieties of state-centred democracy models.

¹⁶³Hegel sees the state as the highest embodiment of reason and passion. Only the individuals who live in a state have a moral value. See for instance Hegel (1840), p. 55: “... it is the moral Whole, the State, which is that form of reality in which the individual has and enjoys his freedom; but on the condition of his recognition, believing in and willing that which is common to the Whole”. Hegel calls the state in summary “...the shape which is the full objective realisation of the spirit...” op. cit., p. 74.

¹⁶⁴For an example of this view, see Volkman (2002), p. 590 f. with further citations. For a deeply metaphysical tone, see Hegel (1821), p. 398: “The state is the reality of the moral idea.”

¹⁶⁵See Volkman (2002), p. 593, who speaks of a “...consensus of hearts...”.

¹⁶⁶Volkman (2002), p. 592 with further citations.

¹⁶⁷Guéhenno (1994).

¹⁶⁸This is the worst-case scenario posited by Offe (1998), p. 111.

This would be a reversal of the historical development that had led to the democratic welfare state.¹⁶⁹

2.3.2 *Democratic Thinking vs. Statist Thinking*

Democracy and the state form a compelling unity—but that is a simplified view of the issue.¹⁷⁰ There is no necessity for democracy to be linked to the state, either epistemologically, conceptually¹⁷¹ or empirically. There are other ideas of democracy that are less fixated on the nation and geographical cohesion.¹⁷² The goals of democracy can also be achieved with stateless elements of democracy.¹⁷³

A glance at the *history of ideas* behind democracy suggests that the link between democracy and the state is not essential. At the centre of the classical idea of democracy is the people, not the state.¹⁷⁴ This is shown by a closer look at Athenian democracy, which is regarded as the first democracy in history.¹⁷⁵ Its basic institution and simultaneously the centre of power was—in theory and in practice—the *ecclesia*, the people's assembly.¹⁷⁶ Other institutions¹⁷⁷ existed, but were of secondary importance. A further indication of the dominance of citizens over state institutions is the enormous amount of time and energy they dedicated to democracy in everyday life.¹⁷⁸ Democracy was a matter for the citizens. It was based on citizens contributing acts and ideas, as well as their strong will for decisions to come from their midst.¹⁷⁹ All citizens participated intensively in government and

¹⁶⁹See Schmalz-Bruns (2005), p. 83, who, loc. cit., p. 84, also discusses a historical-genetic counterargument.

¹⁷⁰Brock (1998), p. 271, speaks in this context of the “view of pedants” in a literary allusion.

¹⁷¹On the conceptual independence of democracy and state, see Müller (2003), p. 125.

¹⁷²For more information, see Münch (1998), p. 377 ff., who closely examines liberal, representative, and deliberative democracy in terms of their independence from the state. An example: in the 1970s, it was recognised that democracy is a way of life that also has significance for society, not only for the state. This was a—not entirely successful—contemporary attempt to separate democracy and statehood. For an extensive account, see Preuß (1995), p. 57.

¹⁷³On stateless and global elements of democracy, see Müller (2003), p. 115 ff. with further citations.

¹⁷⁴On classical Aristotelian democracy theory, see Schmidt (2000), p. 34 ff. with further citations.

¹⁷⁵Dahl (1989), p. 13, rightly describes classical Greek democracy as a source of modern democracy. For details on Athenian democracy, see Dahl (1989), p. 14 ff. with further citations; Meier (1993), p. 477 ff. For a very detailed account, see also Bleicken (1995), p. 190 ff.

¹⁷⁶Fuchs (2004), p. 21, 23 with further citations. For a vivid account of the work of the People's Assembly, see Meier (1993), p. 478 ff.

¹⁷⁷For a concise overview, see Fuchs (2004), p. 21 f. with further citations. For details, see Bleicken (1995), p. 190 ff. with further citations.

¹⁷⁸Meier (1993), p. 491 f.

¹⁷⁹Meier (1993), p. 472.

administration.¹⁸⁰ Every citizen was fundamentally suitable—and willing—to hold public office. Athenian democracy followed the ideal of the constantly alternating states of governing and being governed.¹⁸¹ Democracy was not delegated to the state and its institutions.

The fact that democratic thinking after Athens was primarily deemed analogous to the state was a historical *coincidence*, not an inherent *imperative*. When modern democracy developed in North America and Europe in the eighteenth and nineteenth centuries, the state was the dominant form of community organisation. Creating democracy by democratising the state was the obvious approach. Democracy and the state were thus conceptually linked. A second circumstance came into play. Athenian democracy was the form of government of a manageable face-to-face society in a limited city-state.¹⁸² In the modern territorial states with a population of millions, it was not possible to realise a direct, deliberative democracy along the lines of the ancient pattern.¹⁸³ Only by linking democracy to the principle of representation¹⁸⁴ were mass democracies made possible.¹⁸⁵ In representative democracy, the need for institutions—not necessarily state ones—is *per se* higher than in direct democracy in a city-state. This practical necessity also promoted the link between state and democracy. In practice, the triumph of parliamentary democracy¹⁸⁶ has led to democracy being largely realised in and by the state.

Above all, however, liberal and participatory theories of democracy have always emphasised that democracy must be realised by the individual citizen and society rather than by the state. They see the core and purpose of democracy in individual freedom: citizens' individual rights and interests are the lynchpin of democracy.¹⁸⁷

¹⁸⁰However, many inhabitants of Athens were also excluded from democratic participation. Foreigners living in Athens (Metics), women and slaves were not classed as citizens. Because of the substantial time that democratic participation entailed, not all citizens were able to participate in democratic processes. The poorer ones simply had no time because they had to earn their living. On the limits of Athenian democracy, see Dettenhofer (2001), p. 96f.

¹⁸¹Dettenhofer (2001), p. 93.

¹⁸²Dettenhofer (2001), p. 94.

¹⁸³This is also acknowledged by Rousseau (1767/2000), p. 124 f.; 130 f., who is a strong opponent of the principle of representation in democracy. For a vivid description of the practical difficulties of Roman citizens on the outer reaches of the Roman Empire in actively participating in democratic decision-making, see Dahl (1989), p. 28.

¹⁸⁴On the development of the principle of representation, see Dahl (1989), p. 28 ff.

¹⁸⁵Fuchs (2004), p. 25. The same applies to Dahl (1989), p. 213 ff., who speaks of a “second democratic transformation” in this context.

¹⁸⁶Despite its success, parliamentary liberal democracy is not uncontroversial. It comes under criticism from both normative and practical points of view. For an overview, see Fuchs (2004), p. 35 ff. with further citations. For further detail on the criticism of parliamentary liberal democracy, see Barber (2004), p. 3 ff., who speaks vividly and polemically of “thin democracy”.

¹⁸⁷On the classical liberal democracy theory, see Abromeit (2002), p. 72 ff. with further citations.

In epistemological terms, the close connection between the state and democracy is a coincidence. Democracy does not necessarily depend on the idea of the state.¹⁸⁸

At the core of democracy lies the *sovereignty of the people*. Accordingly, decisions on substantive issues are put in the hands of the people themselves, or they can at least determine their content.¹⁸⁹ That is a deciding factor for whether an organisation is democratic. Whether popular sovereignty is realised in a classical state or in another organisational form is irrelevant for the question of democracy. The erosion of the state by digitalisation and globalisation therefore does not necessarily lead to an erosion of democracy.

2.3.3 A New Democracy in the Digital World

The traditional criteria of democratic legitimacy are always nationally oriented: democratic legitimacy is created by an uninterrupted link between the people of the state and the institutions of the state. This model of democratic legitimacy is of little use to transnational governance structures.¹⁹⁰ How, for example, can democracy be realised when state borders are becoming less important?

Democracy is conceivable without the state. Thus, concepts of democracy that take account of the dissolution of boundaries must, and indeed can, be developed and implemented. However, there is little use in developing arguments and concepts based on a retrospective view of the democratic idea dependent on the nation state. The selectivity of tried-and-tested national perspectives needs to be largely dismissed¹⁹¹ and entirely new models of democracy developed.

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¹⁸⁸ Similarly, Habermas (1996), p. 117, who stresses that the democratic order is not dependent on a “mental rootedness” in the *nation*.

¹⁸⁹ For details on the sovereignty of the people, see Morlok (2001), p. 565 ff. with further citations.

¹⁹⁰ For details, see Keohane and Nye (2000), p. 32 ff.

¹⁹¹ Schmalz-Bruns (2005), p. 89 with further citations.

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Chapter 3

Fragmentation. Many Worlds, One Democracy?



The Internet is typified by far-reaching, highly individualised fragmentation. A synchronised world in which all people share similar experiences is becoming less apparent. What does this fragmentation come from? What impact is it having on the democratic public, discourse and democracy in the digitalised world as a whole?

3.1 Digitalisation: Fragmentation of the World

The digital world is fragmented. An immense number of different, more or less unconnected worlds exist side by side on the Internet. This fragmentation is not limited to the online world. It affects the real world. Here, too, a steep rise in differentiation and fragmentation can be diagnosed. What are the reasons for this? What is its impact on democracy?

3.1.1 *Modularisation. Fragmentation as a Method*

Networks such as the Internet consist of relatively autonomous actors who are repeatedly creating and dissolving the connections between each other.¹ Autonomous actors make networks potentially more and more complex because there is no central authority capable of overseeing, controlling or even terminating all growth processes. How can this potentially unlimited complexity be “managed”? Examples from nature show that modularisation is a proven means of coping with rapidly

¹Mayntz (1992), p. 23 f., argues along the same lines.

increasing complexity.² This principle of complexity management through modularisation is now practised in the development of complex software.³ Complex software is divided into modules and subprograms, which significantly reduces the number of programming errors. Modularisation has become a reliable device in programming practice.⁴

Modularisation is a construction principle of the digitalised world. Fully compatible modules that can be combined in a variety of ways form the building blocks from which new structures constantly arise. Modularisation and self-organisation are the principles on which digital networks and virtual spaces are based. This is hardly surprising given that digitalisation is generated by software, so of course it corresponds to the logic of computer science. And this logic is a logic of modularisation.⁵ Ultimately, a bit—the basis of information technology—is nothing more than a module.

3.1.2 *Asynchronicity. Fragmentation of Time*

Digital technology enables a high degree of asynchrony. Time loses its role as the metronome of society. Asynchronicity becomes the defining characteristic of everyday life and human action. This has an impact on society, on economic structures, business models and not least on politics and democracy.

Digital technology is resulting in potentially unlimited storage possibilities and at the same time the capability to access such stored assets with no spatial and temporal limitations. Production and consumption are thus largely decoupled.⁶ This reduces the time constraints for producers and consumers.⁷

Because temporal constraints are reduced or even eliminated, everyday life is de-standardised in terms of time. Time becomes pluralised⁸: different time schemes or rhythms can be realised in parallel. The temporal de-standardisation of everyday life also has an impact on the life of the individual and on organisational structures in business and society.⁹

²Nature has perfected the concept of modularisation in the course of evolution. Many structures consist of so-called fractals, self-similar modules.

³Kelly (1997), p. 279.

⁴Kelly (1997), p. 279.

⁵Manovich (2001), p. 30 f.

⁶For an apt account, see Nowotny (1989), p. 100.

⁷This is particularly evident in the area of digital media. In traditional broadcasting, consumers are forced to assimilate information when it is broadcast. This time constraint does not apply to digital broadcasting. Consumers can access digital broadcasts whenever they want. The time of transmission becomes irrelevant.

⁸Nowotny (1989), p. 61.

⁹On this, see von Mutius (2000), p. 134 f.

The consequences of the increasing asynchronicity in the economy can be seen particularly clearly.¹⁰ The time-freedom that results from digitalisation allows for temporary, flexible project teams. Increasingly, problems are not solved by fixed departments of a company, but by groups of networked experts who come together and collaborate until a problem is solved.¹¹ Computer-supported cooperative work (CSCW)¹² enables the members of a team to work on the same project at different times.¹³

Another example from the economy are the increasingly widespread *on-demand* concepts: products are stored digitally, standing by until the consumer requests them. Streaming services are one example of this. That encourages asynchrony. Different consumers can purchase and retrieve identical products and marketing measures at different times. Standardisation of time is becoming increasingly redundant.

Digital media technology has profoundly changed the habits of media users. Broadcasting was the typical medium of synchronous media consumption. Those who wanted to watch television programmes or listen to the radio had to do so at given times because all broadcasts were only transmitted at a certain time. The media consumer had no influence on this. He or she had to bow to the power of the editors-in-chief and the broadcast schedulers. That is now a thing of the past. In the digital media landscape, content is consumed when the user wants it.

In any case, the significance of time as a factor in synchronising social life is potentially diminishing as a result of the digital upheavals. In other words, digitalisation is producing multitemporal societies with asynchronous life rhythms. A differentiation of time periods and ideas of time—a pluralisation of time—can be observed within society. Social subsystems are increasingly developing their own ideas of time.¹⁴ Different parts of society have their own specific time.¹⁵

Time in the classical sense is characterised by its sequential character. Time is a sequence of events or “things”.¹⁶ The sequence constitutes the internal chronological rhythm of individual life, historical and social events and cultural development. Uniformity and simultaneity—the two developments driven by digitalisation—blur the sequential structure of time.¹⁷ Time is no longer a clearly structured sequence

¹⁰For a general and elementary account of the impact of digitalisation and the Internet on the economy, see Klodt (2003).

¹¹On the connection between flexible time and networked companies, see Castells (2001), p. 493 ff. with further citations.

¹²On the basic concept of CSCW, see Gross and Koch (2007), p. 4 ff. with further citations.

¹³On the support of asynchronous work processes by CSCW, see Gross and Koch (2007), p. 104 ff. with further citations. For a basic account of the difficulties of asynchronous teamwork in global project teams, see Massey et al. (2003), p. 132 ff. with further citations.

¹⁴Mainzer (2002), p. 119 f.

¹⁵On the fundamentals of the concept of “Eigenzeit (proper time)”, see Nowotny (1989). For a similar account, see Mainzer (2002), p. 119 f.

¹⁶As per Castells (2001), p. 520, with reference to Leibniz.

¹⁷Castells (2003), p. 393, ultimately also argues along these lines, speaking of the destruction of space and time by means of technology.

with beginning and end. Digitalisation enables all forms of expression and content from all times and all places to be mixed, constantly rearranged and communicated at any time and in any place.¹⁸

3.1.3 Filter Bubble. *Fragmentation Through Extreme Personalisation*

The amount of information available on the Internet exceeds all known bounds.¹⁹ This was recognised not only as progress, but also as a problem even at an early stage. How can we avoid drowning in this deluge of data and information? How can new knowledge be generated from data and information that is processed and available in a digital form? Or, more to the point: how does big data become smart data?

The silver bullet being pursued at the moment is the personalisation of the Internet.²⁰ The basic idea is simple: information is filtered out of huge amounts of data and processed. The special selection criteria for this process are the behaviour and preferences of the users.²¹ Special software filters the information that a user retrieves from the Internet based on his or her specific needs and preferences. Each user only sees the websites that—supposedly—really interest him or her. And the websites are flexibly populated with different content, depending on which user visits the website. Plus, Google provides different users with different results for the same search terms.²²

In the meantime, the most important websites on the Internet have developed and installed their own filter programs. Amazon searches in detail for different criteria than Facebook or Google.²³ However, the essence of each of these personalisation strategies is the same: searches are only carried out, and results returned, if they match the known preferences and interests of the searcher as closely as possible. Past surfing and search behaviour determines the content of what is recommended and found in the future.²⁴

At first glance, the idea is alluring. Software uses known interests and behaviours to filter the content that is most likely to be of personal interest to a user. Personal preferences are therefore the instrument for distinguishing between relevant and

¹⁸Castells (2003), p. 401.

¹⁹Mainzer (2016), p. 159 with further citations.

²⁰For basic information, see Goldberg et al. (1992), p. 61 f.

²¹For details using the example of Facebook, see Lischka and Stöcker (2017), p. 22 ff.

²²Pasquale (2015), p. 79.

²³For details see Lischka and Stöcker (2017), p. 20 ff. and Pariser (2012), p. 39 ff. with further citations.

²⁴Lischka and Stöcker (2017), p. 26 using Facebook as an example.

irrelevant content.²⁵ At second glance, however, this hyper-focusing is double-edged and problematic.²⁶ It opens up vulnerabilities and susceptibility to manipulation.²⁷ It narrows the view of the world. Perception is restricted and distorted.²⁸ Everything revolves around the individual user.²⁹ In the past, the Internet was the window to a big wide world where there was much to discover. The personalised Internet, on the other hand, is more of a mirror in which everyone sees only themselves and their preferences and interests. To put it succinctly: everybody is trapped in their own individual *filter bubble*.³⁰ Nobody shares their experiences with others anymore. What are the consequences?

3.1.4 *Hyperfocus and Nice World. Atrophying of Thought*

The Internet is thus being personalised, and people are becoming increasingly entangled in “their” filter bubble. What does this mean for human thinking and behaviour?

Media consumption has an impact on the world view of consumers.³¹ A spectacular example of this is the *mean world syndrome*: those who see a lot of violence on television constantly consider the world to be more dangerous than it really is.³² This affects human behaviour in a society.³³ The medium of television is a central factor of socialisation. In this context, media studies speak of a *cultivation effect*.³⁴ This effect is not limited to the attitude towards violence. Heavy television consumption has consequences on political attitudes.³⁵ It shapes one’s image of women, attitudes towards older people and tolerance towards minorities.³⁶

In that context, it is a truism to say that the Internet also shapes the way users think, see the world and behave socially. Unlike television, however, the personalised Internet does not depict a problematic, violent and hostile world. On

²⁵Lischka and Stöcker (2017), p. 26, put this pointedly: “Matching punctures respect for the truth”.

²⁶Pariser (2012), p. 85 ff. and passim. Benkler et al. (2017). Before them, Sunstein (2006), p. 97 f.

²⁷Pasquale (2015), p. 79 f.

²⁸Pariser (2012), p. 90. Similar but with differentiation: Lischka and Stöcker (2017), p. 37 f. with further citations.

²⁹Pariser (2012), p. 20, compares this with a “return to the Ptolemaic view of the world, in which the sun and everything else revolves around us”.

³⁰Schweiger (2017), p. 92 f. doubts, however, that the filter-bubble effect is so strong.

³¹Gerbner et al. (1994), p. 18. In media impact research, this is now largely uncontroversial. For more details, see Jäckel (2005), p. 198 ff. with further citations.

³²Gerbner et al. (1994), p. 29 f. with further citations.

³³Gerbner et al. (2002), p. 43ff.

³⁴Gerbner et al. (1994), p. 20 ff. with further citations.

³⁵Gerbner et al. (1994), p. 31 ff. with empirical material.

³⁶Gerbner et al. (1994), p. 28 ff. with further citations.

the contrary: the filter programs tend to present a beautiful, clean world.³⁷ We only find and see what suits us on the Internet. Everything else is filtered out. This is problematic from the point of view of democracy because important political problems disappear from public focus. Topics that no one likes are no longer noticed, let alone discussed publicly.³⁸ In case of doubt, however, these are precisely the difficult and unpleasant problems that need to be dealt with and solved politically.

The hyper-focus of the personalised Internet makes thinking more streamlined and less pluralist. Yet: is the *de-pluralisation of thinking* even a problem?

Human perception is shaped by *confirmation bias*.³⁹ People do not perceive the world in an unbiased and objective manner, but rather selectively. They are more likely to take note of information that confirms their opinion and world view and afford such information greater weight.⁴⁰ On the other hand, information that could—or should—induce them to change their opinion hardly registers and is only afforded a lower weighting. Somewhat bluntly, it can be said that people seek out information that confirms their opinions and prejudices. They are reluctant, or simply refuse, to take note of other information. There is still some uncertainty⁴¹ about the causes of this phenomenon—which has been known for a long time and described at an early stage.⁴² However, there is no doubt about its existence, as a range of empirical data proves.⁴³

The role played by *confirmation bias* can hardly be overestimated, because humans only have a limited capacity to process information.⁴⁴ The greater the amount of information, the more the data must be filtered, otherwise it cannot be managed at all. This increases the effect of confirmation bias, which controls the cognitive filtering process⁴⁵: information that corresponds to the existing opinions is selected, perceived and received from the deluge of information. Everything else is (largely) ignored. This effect is clearly reinforced by the personalisation of the Internet.⁴⁶ Ultimately, the *personal Internet* is nothing more than *confirmation bias* cast in algorithms.

³⁷Pariser (2012), p. 158, who introduces the concept of the “nice world syndrome”.

³⁸Pariser (2012), p. 159.

³⁹The term can be traced back to Wason (1968), p. 273 ff. For details, see Klayman (1995), p. 385 f.

⁴⁰Nickerson (1998), p. 177 ff. with further citations.

⁴¹For details on the different explanatory approaches, see Nickerson (1998), p. 197 ff. with further citations. Klayman (1995), p. 411, presents his own plausible thesis.

⁴²Nickerson (1998), p. 176, shows that Francis Bacon described this phenomenon as early as 1620.

⁴³Klayman (1995), p. 406. Nickerson (1998), p. 177 ff. with further citations, provides a comprehensive overview of the empirical studies.

⁴⁴Zimbardo and Gerrig (2004), p. 171 f. with further citations.

⁴⁵It is possible that the filter function is even the cause for the development of the confirmation bias in the history of human development. On these theories, see Nickerson (1998), p. 198 f. with further citations.

⁴⁶For a highly critical account, see Pasquale (2015), p. 79 f.

Confirmation bias has (evolutionary) advantages. It encourages a highly concentrated and effective form of thinking. However, overemphasising this thinking is dangerous. Creative thinking and innovative solution to problems depend on coincidences and disruptions. Coincidences give thinking a new, previously unknown direction. Coincidences cause disruption. When thinking is disrupted, it departs from its well-trodden paths and finds new routes. People who are exposed to multicultural influences are usually more creative.⁴⁷ Only external input leads to the development of new ideas. An example of this is *serendipity*.⁴⁸ Even the history of evolution is inconceivable without chance. The random mutation—combined with natural selection—enables progress.

Both—coincidences and disruptions—are (almost) a thing of the past on the personalised Internet. The personalisation algorithms ensure that only content that matches previous, known preferences and behaviours is found. This cannot be truly new and disruptive or alienating. What does that mean for thinking? It is always going round in circles and ultimately atrophies.

3.2 The Public Sphere in the Digitalised World

The public sphere has been the basic concept of European political culture since the Athens polis.⁴⁹ Democracy is inconceivable without a public sphere.⁵⁰ The Internet and digitalisation are changing the political public sphere incrementally and radically. One public sphere becomes many fragmented public spheres that exist in parallel to each other. Social media are becoming an important component of public life in the digitalised world. Internet search engines are involved in creating a public sphere in the digitalised world. What does this mean for democracy? In its present form, it is still dependent on the traditional media public sphere and a free public arena. At the same time, both are increasingly changing.

3.2.1 (*Media*) Public Sphere and Democracy

The political public sphere fulfils indispensable functions for democracy.⁵¹ It is the forum where interests and opinions are expressed.⁵² It thus connects the political

⁴⁷This is demonstrated by Maddux et al. (2009), p. 156 ff. with empirical examples.

⁴⁸For details, see Kantorovich (1993) *passim*.

⁴⁹Brunkhorst (2004), p. 490.

⁵⁰On the importance of the public sphere for democracy, see Brunkhorst (2004), p. 490 ff. with further citations. For fundamentals on the political and democratic function of the public sphere, see Habermas (1962/1990), p. 122 ff.

⁵¹On this, see Höffe (1999), p. 117, and Gerhards (2000), p. 287 with further citations.

⁵²Höffe (1999), p. 117.

centre in which decisions are made with the periphery of the political system for which and about which collectively binding decisions are made.⁵³ At the same time, the public sphere is also the arena in which influence and power are debated.⁵⁴ Beyond these *enabling functions*, the public sphere has a *pacifying function*: because a functioning public sphere also lets the opposition and minorities have their say, it contributes to domestic peace.⁵⁵ Public—ideally discursive—disputes over power and decisions ultimately also have *educational* effects. The (communicative) style of democratic debate develops an exemplary character when and because it becomes public. Of particular importance is also the *controlling function* of the public sphere with its power-limiting effect.⁵⁶ It is a critical authority before which the whole of politics must justify itself.⁵⁷ The people can only exercise their powers of control if they are also informed, i.e. if there is a principle of public governance.⁵⁸ Before political decisions are made, the public ensures that as many opinions and facts as possible are taken into account. Through *ex post* control, it urges policymakers to make any necessary revisions.⁵⁹

In modern mass society, the public sphere primarily means the public sphere of the mass media⁶⁰ because what we know about the world, we know through the mass media.⁶¹ This also applies above all to the perception of political and democratic processes and content.⁶² It is primarily within and through the mass media that public opinion emerges, which then exerts political influence.⁶³

Democracy presupposes a certain congruence of rulers, citizens and the public.⁶⁴ This congruence is increasingly being lost in the digitalised—and thus unbounded—world. In the globalised and digitalised—i.e. unbounded—world, the public sphere

⁵³Eder et al. (1998), p. 326 f., with further citations.

⁵⁴Höffe (1999), p. 117. On the origins of this political function of the public sphere in England at the beginning of the eighteenth century, see Habermas (1962/1990), p. 122.

⁵⁵Höffe (1999), p. 117.

⁵⁶Marschall (1998), p. 43 f., with further citations.

⁵⁷Höffe (1999), p. 117.

⁵⁸Morlok (2001), p. 573 f. with further citations. Similar: Gerhards (2000), p. 287 with further citations.

⁵⁹Höffe (1999), p. 117.

⁶⁰Marschall (1998), p. 45 f., with further citations. The emergence of a political public sphere in the early eighteenth century was closely linked to structural change and the increasing strength of the press. For a detailed account, see Habermas (1962/1990), p. 275 ff.

⁶¹Luhmann (1996), p. 9, sums up the significance of the mass media for the perception of the world in this pithy phrase.

⁶²Marschall (1998), p. 46, with further citations.

⁶³On the importance of public opinion for democracy, see Sartori (1997), p. 94 ff.

⁶⁴Gerhards (2000), p. 287.

can essentially only be a democratic forum if it, too, is also unbounded or at least cross-border. Even though the term “global public” has become established in the meantime, the public sphere and public opinion are still largely, *if no longer completely*, limited to the nation state. This can also be observed in the European Union. There is (still) no European public sphere and no European public opinion.⁶⁵ Public spheres in Europe are still national in character, despite the advanced level of integration. Instead of a European public sphere, there are many national public spheres. Nevertheless, there are developments moving towards a global, borderless public sphere. The progressive dissolution of national public spheres is mainly driven by several factors: the mass media in general and the Internet in particular, and global INGOs.

Above all else, electronic mass media are potentially cross-border in nature. Technical factors alone mean that purely national television is difficult to implement in practice, although its existing potential has not fully been exhausted. Due to the language barriers alone, the mass media are still *de facto* more or less nationally orientated, i.e. within boundaries.⁶⁶ The Internet has a similar potential to create a borderless, supranational public sphere.⁶⁷ However, here, too, the potential for an Internet public sphere has by no means been fully exploited. At the same time, the possibilities it offers can be seen not least by citizen networks that cross national borders⁶⁸ and global Internet-based discussions, opinion-forming processes and elections. It can be diagnosed that a network-mediated democratic public sphere is at least starting to emerge.⁶⁹

3.2.2 *Digitalisation: Public Spheres Instead of One Public Sphere*

In modern mass societies, unlike the Athenian *agora democracy*, the political debates of the citizens on the market square no longer shape the sense of community. Social identity is shaped by the mass media, at least to a large extent.⁷⁰ At the same

⁶⁵Similarly, Gerhards (2000), p. 288 ff., who analyses the reasons for this. However, Eder and Kantner (2000), p. 316 ff. with further citations, take a different view and see a European public sphere, at least in certain subject areas.

⁶⁶Gerhards (2000), p. 290, sees the lack of a common European language as an important obstacle for a European public sphere. The idea can be applied all the more to the global public sphere.

⁶⁷To speak in general terms of the Internet as a form of media lacks the requisite differentiation. At this point, however, undifferentiated use is sufficient. For details, see Leib (1998), p. 89.

⁶⁸For details, see Leib (1998), p. 90; von Korff (1998), p. 95, each with further citations.

⁶⁹See Schiller (1998), p. 129 ff. with further citations.

⁷⁰Habermas (1962/1990), p. 90 f., traces how the modern mass media public has developed in Europe since the seventeenth century. How strong the influence of the mass media really is, however, is fiercely disputed. Von Beyme (1994), p. 320 ff., is noticeably reticent when he speaks of exaggerated theories of the power of the media in relation to politics and ascribes only a

time, the trend in media development is moving away from integration and towards fragmentation. What does this mean for the democratic public in the digitalised world?

Electronic media are highly segmented—and the Internet more so.⁷¹ A rapid increase in the range of media has been made possible not least by digital technology.⁷² Each individual media consumer can therefore compile his or her own personal media menu.⁷³ This has been empirically observed in television for some time now: those who have more channels to choose from via cable connection or satellite dish also use them.⁷⁴

The fragmentation of the media supply and the media audience has a problematic consequence in terms of democratic theory: there is no longer one, but rather many very different media *public spheres*. The trend is reinforced by its very reflexivity. The more fragmented the audience is, the more specialised the media becomes in order to address and reach the different segments of the public in a targeted manner.⁷⁵ Catering to consumers' desires further deepens the fragmentation of viewers. The public is inexorably differentiating itself through ideologies, values, tastes and lifestyles. One public is becoming many *publics*.⁷⁶

It is doubtful that the multitude of different, often unconnected, publics can still function as a forum for democratic communication. Moreover, with the fragmentation of the public, its commonalities are also lost. The formation of a common identity necessary for a democracy becomes more difficult,⁷⁷ if not impossible. It is not yet possible to say conclusively whether this development is likely to be intensified or, conversely, weakened by Internet communication. However, initial indications point to a strengthening effect.⁷⁸

3.2.3 *Fragmentation and Majority Voting*

The processes of the dissolution of boundaries and denationalisation being triggered and driven by digitalisation and globalisation are creating major problems for the

“subsidiary function” to the media. Yet he also diagnoses, op. cit., p. 325, a “modification of politics”. In addition to the media, personal relationships and conversations play an important role in the development of ideas and attitudes. See Schenk and Rössler (1994), p. 262 ff.

⁷¹Holtz-Bacha (1998), p. 219 ff. with further citations; Castells (2001), p. 387 with further citations.

⁷²Castells (2001), p. 387 with further citations, on the diversification of the public by multiplying the number of television channels.

⁷³Sunstein (2001), p. 56 ff.

⁷⁴Holtz-Bacha (1998), p. 219, with further citations based on empirical studies.

⁷⁵Castells (2001), p. 388 f.

⁷⁶See Holtz-Bacha (1998), p. 222 ff. with further citations.

⁷⁷Holtz-Bacha (1998), p. 222.

⁷⁸Holtz-Bacha (1998), p. 234 ff. with further citations.

idea of majority voting.⁷⁹ Majority democracy can only be practised in a relatively homogeneous community⁸⁰ because the majority and minority must be linked by a basic consensus.⁸¹ This is the only way to ensure the protection of minorities and widespread acceptance of majority decision-making. In the traditional concept of democracy, which is strongly geared towards the nation state, there is such a—more or less—homogeneous community: the constitutive people that has laid down its basic consensus in the state constitution. Majority voting therefore becomes problematic when state borders (partially) dissolve and the function of states changes. Majority democracy is unsuitable for the highly segmented, supranational and multicultural communities created by globalisation and digitalisation.⁸²

Digitalisation also poses a risk for majority voting, the existential principle of democracy. The processes of the dissolution of boundaries and denationalisation being triggered and driven by digitalisation and globalisation are creating major problems for the idea of majority voting.⁸³ Majority democracy can only be practised in a relatively homogeneous community⁸⁴ because majority and minority must be linked by a basic consensus.⁸⁵ This is the only way to ensure the protection of minorities and widespread acceptance of majority decision-making. In the traditional concept of democracy, which is strongly geared towards the nation state, there is such a—more or less—homogeneous community: the constitutive people that has enshrined its basic consensus in the state constitution. Majority voting therefore becomes problematic when state borders (partially) dissolve and the function of states changes. Majority democracy is unsuitable for the highly segmented, supranational and multicultural communities created by globalisation and digitalisation.⁸⁶ They need to develop new procedures and rules that are as democratic as the majority principle. This challenge to democracy associated with digitalisation should not be overestimated.

⁷⁹Similarly, Abromeit (2002), p. 158, who describes majority voting as “the greatest stumbling block on the way to an applicable post-national concept of democracy”.

⁸⁰Archibugi (1998), p. 206; Abromeit (2002), p. 158. Similarly, Hofmann and Treier (1989), marginal no. 55, who consider a minimum level of political, social and cultural homogeneity to be indispensable.

⁸¹Rhinow (1984), p. 250. Böckenförde (2004), marginal no. 65. This basic consensus may also include a fundamental democratic ethos. See Böckenförde (2004), marginal no. 75 ff.

⁸²Abromeit (2002), p. 158, is emphatic here.

⁸³Similarly, Abromeit (2002), p. 158, who describes majority voting as “the greatest stumbling block on the way to an applicable post-national concept of democracy”.

⁸⁴Archibugi (1998), p. 206; Abromeit (2002), p. 158. Similarly, Hofmann and Treier (1989), marginal no. 55, who consider a minimum level of political, social and cultural homogeneity to be indispensable.

⁸⁵Rhinow (1984), p. 250. Böckenförde (2004), marginal no. 65. This basic consensus may also include a fundamental democratic ethos. See Böckenförde (2004), marginal no. 75 ff.

⁸⁶Abromeit (2002), p. 158, is emphatic here.

3.2.4 *Public Space: Social and Cultural Significance*

The public arena has always had a special meaning for human societies. It is the space for social interactions,⁸⁷ encounters, the assertion of interests and conflict resolution. In the public arena, people present and experience who they are.⁸⁸ Sports, festivals and processions take place in the public arena. The public arena generates social connectivity.⁸⁹ For this reason and many more, the literature of sociological and cultural studies refers to the public arena as living space, social space, socialisation space.

It has also always been important as a symbol throughout history. Power is demonstrated in the public arena—as for example military parades show. In the public arena, political and social claims are staked through demonstrations. Last but not least, political conflicts are also carried out in the public arena. Above all, the public arena in the city is also a place of rebellion.⁹⁰ This is evidenced in that historical events are often associated with public places. Recent examples include Tiananmen Square in Beijing, Alexanderplatz in East Berlin, Taksim Square in Istanbul and Maidan Square in Kiev. Another, more mundane example are football pitches and football stadiums. Sports sociology and social psychology have shown that they play a role in the social cohesion of societies that can hardly be overestimated. A more recent example of the connection between the public arena and football and social cohesion is *public viewing*.

To put it bluntly and simply: the history of democracy begins with the *agora*.⁹¹ The people's assembly (*ecclesia*), the most important decision-making body, met on the Athens market square. Citizens met in the public arena to debate and decide political issues. Democracy researchers place the locus of the invention of democracy at this point.⁹²

To this day, public communication is part of the essence of democracy.⁹³ In small democracies, citizens still gather in the marketplace today to decide political issues together. Switzerland is an example of this. Of course, this is practically impossible in modern mass democracy. Therefore, public communication in democracy today largely takes place via mass media and on social media. Ultimately, there is no longer one public arena. There are many different public spheres.⁹⁴

The—analogue—public arena nevertheless remains important for democracy because it is here that completely different worlds come up against one another.⁹⁵

⁸⁷Rauterberg (2013), p. 138.

⁸⁸Rauterberg (2013), p. 59 ff.

⁸⁹Rauterberg (2013), p. 139 ff.

⁹⁰Rauterberg (2013), p. 10 ff.

⁹¹On the *agora* in general, see Meier (1993), p. 442 ff.

⁹²Bleicken (1995), p. 55 f.

⁹³Arendt (1999), p. 36 f.

⁹⁴Rauterberg (2013), p. 141.

⁹⁵See Arendt (1999), p. 62 ff.

This can lead to disruptions and new ideas. Democratic decision-making capability is encouraged and enabled—the ability to make compromises with completely conflicting interests—instead of using coercion and violence.⁹⁶ The importance of the public arena for democracy is documented by the fundamental right to freedom of assembly in Article 8 of the German Basic Law. In the words of the German Federal Constitutional Court, as “collective freedom of opinion” it is indispensable for the democratic order (BVerfGE 69, 315, 342-Brokdorf). Taking this to its logical conclusion means that the public arena is also indispensable for democratic order.

3.2.5 *Social Media as a Democratic Public Sphere?*

The Internet in general and the social media in particular harbour great democratic potential. Democracy is based on social interaction and the widest possible communication between the broadest range of stakeholders. Anything that enables or facilitates communication and interaction therefore potentially promotes democracy. Social media, communication platforms, messenger services and similar tools enable a wealth of new and additional communications and forms of relationships. At the same time, communication boundaries that were traditionally problematic for democracy can be expanded. From the very beginning, democratic hopes and even utopias have been associated with the Internet. Nobody has described them as beautifully and impassionedly as John Perry Barlow, the cyber pioneer and Internet thought-leader. His Declaration of Independence for Cyberspace of 1996 states: “We will create a civilization of the Mind in Cyberspace.”⁹⁷

The access barriers to *social media* are—consciously and as a matter of principle—very low. An account can be set up quickly. Tweets can be fired off spontaneously and instantaneously. Posts and comments can be quickly written and published. They reach potentially innumerable addressees all over the world. These communication methods, which have evolved and improved in what is no less than a revolution, offer many opportunities—including and especially for political and democratic processes.⁹⁸

Public opinion is no longer formed by a few professional journalists alone. Increasing numbers of bloggers, Tweeters and posters are also participating in creating a public sphere and shaping public opinion. This *blogosphere* has joined

⁹⁶Arendt (1999), p. 40.

⁹⁷Barlow (1996).

⁹⁸For an overview, see Haas (2015), p. 27 f. with further citations. On the role of Twitter in revolutions and political upheavals, see van Dijck (2013), p. 75 with further citations.

the traditional public sphere.⁹⁹ Its importance is increasing.¹⁰⁰ Today it is already a part of the democratic discourse that should not be underestimated.¹⁰¹ That is no coincidence. An important—albeit not the only—goal of (topic-based) bloggers is to contribute to the formation of opinion.¹⁰² The few classical leading media are losing their *gatekeeping function*.¹⁰³ They are being gradually replaced by search engines and web portals, which also filter content, but according to different criteria.¹⁰⁴ New political actors are entering the political stage. A digital political class is emerging.¹⁰⁵

The breaking up of established media structures has advantages from the point of view of democratic theory.¹⁰⁶ The published spectrum of opinions is broadening; many more citizens can participate in public discourse and influence political decisions. This could make the political debate more democratic from a grassroots perspective.¹⁰⁷

However, this development has a downside: even contributions of poor quality or problematic content find a wider public and have an effect.¹⁰⁸ Unobjective, polemical or hysterical expressions of opinion¹⁰⁹ spread quickly and potentially globally. They are then on an equal footing with factual, thoughtful and sensible contributions to the debate. But this is a problem that is already conceptually linked to the democratic form of government. The whole is more than the sum of its parts. Applied to social media, that would mean that the whole swarm of Internet users is smarter than all the individual users put together. Maybe this *swarm intelligence*¹¹⁰ can ensure the quality of the Tweets and posts in the long run. However, empirical evidence for this theory is still outstanding.

Can the Internet public sphere replace the classical public sphere in democracy? That is doubtful. Thus far, the Internet and social media have not yet fulfilled the democratic hopes placed in them. The vast majority of public discussions in digital

⁹⁹For a detailed account of the development of the blogosphere, see Barlow (2007), p. 143 ff. with further citations.

¹⁰⁰See, for example, the statistics in the Global Digital Report 2015: <http://wearesocial.de/blog/2015/01/global-digital-report-2015/> (28/8/2019).

¹⁰¹Hindman (2009), p. 109 ff. On the relevance of blogs, see Nuernbergk (2014), p. 174 with further citations; Imhof (2015), p. 23 considers the political significance of social networks to be “marginal”. Similarly, Bernhard et al. (2015), p. 52 f. on an empirical basis.

¹⁰²Schenk et al. (2014), p. 27 f.

¹⁰³Beckedahl and Lüke (2012), p. 171 f. For a basic account of the gatekeeping function, see Manning White (1950), p. 383 ff.

¹⁰⁴Hindman (2009), p. 12 f. and 80 f. with further citations.

¹⁰⁵Bieber (2010), p. 66 ff. with further citations.

¹⁰⁶For details, see Armstrong and Moulitsas Zuniga (2006), p. 169 ff.

¹⁰⁷Froomkin (2004), p. 10 f.

¹⁰⁸Hindman (2009), p. 112.

¹⁰⁹On the quality of Tweets, see van Dijck (2013), p. 77.

¹¹⁰For a basic account, see Surowiecki (2005), p. 23 ff. and *passim*.

networks do not revolve around political issues.¹¹¹ Empirical studies indicate that the Internet public is highly apolitical. Websites with political content are rarely visited.¹¹² Even on Facebook or Twitter, completely apolitical content dominates.¹¹³ Nevertheless, it would be a mistake to underestimate the political effects and possibilities of social media.¹¹⁴ Practice shows that apolitical social media can definitely have political effects.

3.2.6 Social Media: Exclusive Public Sphere by Private Entities?

Social media are not publicly owned. They belong to private companies that operate the servers and dispose over the software. Like any private company, Facebook & co. can exclusively decide who gets access—and who does not. Ultimately, the public sphere on social media is only an apparent public sphere. In reality, these are electronic platforms and networks that are privately owned and controlled.

This becomes apparent as soon as we look at the access requirements in the general terms and conditions of the platform operators. The operator—arbitrarily—decides who gains access, with no control mechanism. However, a public sphere in a democracy typically, necessarily, requires everyone to have access in principle and for independent authorities to be able to control access restrictions.

The operators of social media also claim extensive censorship rights with regard to content. A more recent example is Twitter, which searches the short messages of its users according to certain criteria and suppresses messages if they contain certain content. This, too, cannot be reconciled with a democratic public sphere. For this reason, it is impossible in principle for social media to replace the democratic public sphere. It is conceivable, however, that they will complement the democratic public sphere.

3.2.7 Machine Censorship: The Power of Search Engines

The straightforward and potentially unlimited access to the world's knowledge via the Internet is an illusion. Hardly anyone is able to draw information from the Internet completely under their own steam. In practical terms, the overabundance of data and information can only be managed using search engines.

¹¹¹Schweiger (2017), p. 94 f. Mistaken by Froomkin (2004), p. 9.

¹¹²Hindman (2009), p. 131, who notes that pornographic sites are visited a hundred times more often than political sites.

¹¹³A similar conclusion can be found in Bieber (2010), p. 54.

¹¹⁴Bieber (2010), p. 54 ff. is instructive here.

Google & Co. increasingly filter what we can and are allowed to know. Inclusion, exclusion and ranking—these are their methods, and their power is based on them.¹¹⁵ They also shape our view of the world,¹¹⁶ and they affect our behaviour.¹¹⁷ Contrary to their claims, they do not just *show* us the world. They *create* the world, too. But is that a problem? Search engines are not independent public and democratically controlled sources of information. They are operated by private corporations that want and have to make a profit via this activity.¹¹⁸ Therefore, we should not expect any independent, objective information as a search result. Search engines decide which information is displayed in which order. This is implemented by algorithms that are a strictly guarded trade secret.

This is aggravated by the quasi-monopoly of a single search engine. It is Google that handles the vast majority of search queries. We see the world through the *Google goggles*.¹¹⁹ At the heart of its operations lies Google's legendary *PageRank* algorithm, which evaluates the importance of web pages. The rank of a web page found in this way is the basis for Google's decision as to whether and how the website is displayed.¹²⁰ The problem is that the criteria *PageRank* uses to decide are completely untransparent. In any event, they are criteria that are controlled by the corporation's private profit interests. Given the paramount importance of Google for citizens' opportunities to obtain information, this is a serious democratic problem.¹²¹ To put it bluntly: this is *machine censorship* by a private company.¹²²

Private companies with pronounced business interests and great (economic) power control citizens' opportunities to access information, and that poses a threat to democracy.¹²³ After all, democracy only works if as many citizens as possible have unhindered access to as much objective information as possible. How could this problem be adequately solved democratically? A possible way would be to create a public—national or better still European—search engine. Its search algorithm should be transparent and should be kept under public control. This is the classic task for lawmakers: they must strike a fair balance between private interests and the public good.

¹¹⁵Pasquale (2015), p. 61.

¹¹⁶For a highly critical account, see Schroeder (2014), p. 145 ff.

¹¹⁷See Zittrain (2014), p. 337 with further citations.

¹¹⁸Pasquale (2015), p. 66 ff.

¹¹⁹Diaz (2008), p. 11.

¹²⁰For details, see Pasquale (2015), p. 64 f.

¹²¹Diaz (2008), p. 16 f. with further citations.

¹²²Hofstetter (2016), p. 393f., is explicit in this regard.

¹²³The study by Hong and Kim (2018), p. 388 ff., is interesting, which shows empirically that search engines force readers to concentrate on a few large media. This contradicts the thesis that the Internet *per se* opens up broader information possibilities, even outside the mainstream.

3.3 Democratic Discourse in the Digitalised World

Democracy thrives on discourse and compromise. Both presuppose a minimum amount of reason and rationality. In a fragmented society, it is becoming more difficult to have reasonable discussions and to make thoughtful compromises.

3.3.1 *Digital Discourse: Attention and Anonymity*

Discourse lies at the heart of democracy. This naturally applies to the deliberative notions of democracy.¹²⁴ But also most other—representative—democratic theories emphasise the importance of debates and discussions for a functioning democracy. The basic idea of democracy is to solve problems by exchanging arguments, opinions or visions. This can only work if public discourse is characterised by a minimum level of reason and objectivity.¹²⁵ This also requires citizens who have a minimum amount of common sense and commitment to the community.¹²⁶ What impact do social media have on public debate?

(At least) two characteristics are typical of communication on social media: the search—let alone: addiction—for attention, and the possibility of anonymity. Both have an impact on the content of the communication.

Blogs, posts and other entries on social media have or want to be read.¹²⁷ Competition, however, is fierce. How does one get the attention of users in the attention economy?¹²⁸ Conflicts, violations of legal or moral norms or scandals generate particular attention.¹²⁹ Ultimately, the entertainment value is what matters. Bloggers, posters and users understand this. They now regard entertainment by other users to be an important aspect of their activities.¹³⁰ Entertainment is the opposite of everyday life, normality and routine—no matter how shiny and vague the term may be in detail.¹³¹ Entertainment is always—at least to some extent—an adventure.¹³² Blogs, tweets and posts are therefore only entertaining when they appeal to the user's

¹²⁴ See Schmidt (2010), p. 239 f. with further citations.

¹²⁵ Habermas (2007), p. 433 defines prerequisites for the ideal democratic discourse. On a practical level, they will rarely be fulfilled. However, democratic pragmatism can also manage without ideal conditions.

¹²⁶ Schmidt (2010), p. 427 with further citations.

¹²⁷ For an idea of numbers, see Schenk et al. (2014), p. 23.

¹²⁸ Georg Franck (1998) coined the term.

¹²⁹ Luhmann (1996), p. 59; Meyer (2001), p. 47.

¹³⁰ Schenk et al. (2014), p. 28, on the basis of an empirical survey.

¹³¹ Altheide and Snow (1979), p. 20 sum up this in an inimitably American way: entertainment is “bigger than life”.

¹³² Altheide and Snow (1990), p. 16.

moods and trigger feelings.¹³³ For blogs, tweets, posts this means that they are emotional, hysterical, extreme, simplifying, polarising and sensation-fixated to get the attention of the users.¹³⁴ They often spread hysterical rumours without a rational basis or crude conspiracy theories. In a word: the ideal blog, post and Tweet is short, dramatic and bloody.¹³⁵

The online world is not only home to the dedicated self-promoters who consciously seek the light of the digital public. Anonymity is also a characteristic of communication in the digital public sphere. Participants in discussions often remain anonymous; contributions to debates and comments are frequently delivered under aliases or pseudonyms. This online anonymity has an important effect: people feel liberated and often act completely differently than they would in the non-anonymous world. This *online disinhibition effect*¹³⁶ is double-edged.

It liberates and enables a person to live out unknown, new aspects of his or her personality.¹³⁷ This is not only a chance to shape one's own individual life, but also for democratic discourse. Democracy thrives on fearless, open and honest contributions to discussion. Anonymity can contribute to this. It protects people from being sanctioned for expressing opinions. In dictatorships and authoritarian regimes, the importance of anonymity in political discourse is obvious. But even in free societies there are economic, cultural, social and psychological constraints that make free expression of opinion more difficult. Anonymity—and this is not a new insight—reduces fears and promotes authentic contributions that are not modified for tactical reasons.¹³⁸

However, anonymity also has a dark side. The disinhibition through digital anonymity not only encourages people's good qualities. Their negative dispositions and psychological abysses also come to light.¹³⁹ Our psychological and social inhibitions drop precisely because we do not have to take responsibility for our opinions and contributions under the cloak of anonymity.¹⁴⁰ This promotes aggressive behaviour and unreflective, resentful, hostile, disparaging, hateful comments. "Shitstorms" are only the best-known example of this. Apart from that, there is a risk that the quality of the content of the contributions will be lower.¹⁴¹ In short: those

¹³³ On the decisive role of emotions in TV entertainment shows, see Altheide and Snow (2001), p. 17. But this can also be generalised to all human utterances.

¹³⁴ For details on the publication logic of bloggers, see Holiday (2012), p. 59 ff. and 106 ff.

¹³⁵ Winterhoff-Spurk (2001), p. 157 f. with further citations, albeit in relation to television programmes.

¹³⁶ For a basic account, see Suler (2004), p. 321 f. Or, earlier, Dyer et al. (1996), p. 289 f.

¹³⁷ Suler (2004), p. 321, refers to this as "benign disinhibition".

¹³⁸ Suler (2004), p. 321 f. An instructive example is described by Ook and Gong (2004), p. 25 ff.

¹³⁹ Suler (2004), p. 321, therefore speaks vividly of "toxic disinhibition". For more details, see Lapidot-Lefler and Barak (2012), p. 435 with further citations.

¹⁴⁰ Suler (2004), p. 322; Lapidot-Lefler and Barak (2012), p. 435.

¹⁴¹ For an instructive insight, see Weichert (2014), p. 206 f.

who do not have to take responsibility may think less before expressing themselves and acting. This has noticeable consequences.

3.3.2 *Emotionalising the Democratic Debate*

The developments outlined are influencing how the character of the political discussion in the public sphere is changing. There is much to suggest that democratic debate is becoming more emotional, more hysterical even. The underlying reasons for this are the low access threshold to digital communication and the far-reaching possibilities for anonymous communication.

The incredibly large number of blogs, tweets and posts leads to increased competition for users' attention. The result is that content is becoming more emotional and hysterical. After all, emotionality is a proven method of attracting attention. At the same time, the statements are not subject to any quality control. The filter function of classic mass media is bypassed. Even highly emotional, hysterical and ill-considered utterances can spread widely in an instant. Under the cloak of anonymity, inhibition thresholds fall. This, too, has the consequence that the contributions to the debate become more emotional, hysterical, polemical.

This emotionalisation of the debate is further intensified by the interplay with the "nice world phenomenon" already discussed.¹⁴² The emotional, even hysterical, contributions are taken up by people whose thinking is narrowed by the limitations of social media. They are not used to questioning content critically. It will therefore be difficult for them to classify and relativise the emotional content from the blogosphere. The result: hysterical expressions of opinion cause hysterical reactions. This leads to a *vicious circle of political hysteria*.

3.3.3 *Social Bots: Discourse and Election Campaigns by Robots*

Social bots are special computer programs that (can) conduct independent dialogues with users or other bots.¹⁴³ What is special about them is that they can impersonate human users and they are difficult to recognise as programs. Their development is progressing rapidly. Work is now focusing on them recognising and reacting to the emotions of their conversation partner.¹⁴⁴

¹⁴²As above, point 3.1.3.

¹⁴³See Röttgen and Juelicher (2017), p. 228 and Franck and Müller-Peltzer (2017), p. 242, each with further citations.

¹⁴⁴See point 2.1.5 above.

Bots are associated with great opportunities.¹⁴⁵ Chatbots are increasingly being used in the business sector.¹⁴⁶ They can advise customers or be used as innovative advertising tools.¹⁴⁷ They extend the possibilities of the individual to make use of his or her constitutionally protected freedom of opinion and information.¹⁴⁸ However, they offer rich pickings for abuse. It is easy to fool others with them. The fact that it is just a piece of software, and not a human, that is acting, is often concealed. In addition, a false profile can be composed that has a certain impact.¹⁴⁹ At that point it becomes doubtful how far the protection of fundamental rights can extend.

Bots therefore contain an enormous potential for manipulation, which makes them problematic—not only, but also in the political field.¹⁵⁰ This can be illustrated by two examples. Chatbots can manipulate political discussions on the Internet by simulating (majority) opinions that do not really exist.¹⁵¹ This can have political consequences. Social psychological studies show that people tend to agree with majority opinions. Bots can be programmed to spread fake news on a massive scale.¹⁵² If it is only repeated often enough and spread widely enough, fake news will also be believed—and will become the basis for political decisions.

The use of bots in personalised election campaigns via the Internet is particularly sensitive. They can be used to address potential voters directly and personally. The more they know about the voter, the more accurate and effective they can address them. This is ideal from the point of view of election campaign strategists. They do not have to find the one formula that appeals to as many voters as possible. They can address each individual voter with individual content. They can take his or her very personal ideas, wishes, needs and fears into account. The bots are programmed to respond exactly to that. Here the boundary between permissible election campaigns and inadmissible systematic voter manipulation is deliberately crossed. This is unacceptable from a democratic point of view.

Election campaigns are fights. But, like all political action, they must abide by the rules of the constitution.¹⁵³ Nor are they an end in themselves. Voters should be able to develop and pass their verdicts in a free, open process of opinion-forming.¹⁵⁴ According to the democratic constitution, election campaigns must therefore be open and transparent. The content that is disseminated in the offline world during classical

¹⁴⁵ As Milker (2017), p. 217 f. and Franck and Müller-Peltzer (2017), p. 241, point out correctly.

¹⁴⁶ On this, see Röttgen and Juelicher (2017), p. 227 and Franck and Müller-Peltzer (2017), p. 243 each with further citations and examples.

¹⁴⁷ Köbrich and Froitzheim (2017), p. 260f. with further citations, gives a brief overview.

¹⁴⁸ The question of to whom the content can be attributed—the programmer of the bot or the bot itself—is exciting and unanswered. See Krupar (2017), p. 282 ff. with further citations.

¹⁴⁹ Milker (2017), p. 218 f. with further citations.

¹⁵⁰ On issues of social bots from a perspective of criminal law, see Volkmann (2018), p. 59 f.

¹⁵¹ For current examples, see Milker (2017), p. 217.

¹⁵² Volkmann (2018), p. 58 with examples.

¹⁵³ BVerfG NJW 2001, 1048, 1051.

¹⁵⁴ BVerfG NJW 2001, 1048, 1051.

election campaigns is observed and critiqued by the public. Unacceptable content is identified and corrected. This is the basic idea of election campaigns in a democracy. This transparency is completely lost in the personalised election-campaign-by-bot. There is no longer any public control over the content of the election campaign. A democratic election campaign also involves voters discussing and reflecting the contents of the campaign with each other. Election decisions should be the result of a communication process. This, too, is no longer possible if every voter is addressed in a completely non-transparent and personal manner. Then all voters are addressed and manipulated in isolation—and have no basis for discussion to uncover manipulations.

3.3.4 *The End of the Compromise?*

Open democracy is characterised by clashes of interests and conflicts. Nevertheless, it needs to solve its problems in such a way that as many citizens as possible can ultimately identify with the resolution. Broad acceptance despite violent conflicts of interest—how does that work?

Compromise is a tool for peacefully integrating conflicting interests and achieving broad acceptance. Only if a compromise is found can diverse, possibly even conflicting interests be taken into account and reconciled.¹⁵⁵ Everyone sees some of their original demands reflected in the compromise in a more or less amended form. This makes a broad acceptance of the compromise solution possible. The different parties to the conflict can continue to live together peacefully in a society.

Finding and making complex and creative compromises is difficult. This also has to do with the fact that compromises have to be negotiated in the set of tensions between peace and justice.¹⁵⁶ A compromise serves purposes of peace; it is not always just. Without training and lengthy learning processes, there is no ability to compromise. Compromises can only be made by those who can understand other people's point of view. Last but not least, the tolerance limits of the other party—his or her “red lines”—must be realistically assessed. A compromise is unthinkable without questioning and revising one's own opinions and attitudes.¹⁵⁷ This is the only way to accommodate others and their equally legitimate interests. These abilities are not innate. They must be acquired and repeatedly practised.

More and more people are spending more and more time on social media. This affects how they think and act, their personal development and their abilities. Are social media a factor that promotes the ability of users—and at the same time citizens—to compromise? That is very doubtful.

¹⁵⁵For a basic account, see Simmel (1908/1968), p. 250.

¹⁵⁶On this set of tensions, see Margalit (2011), p. 16 f.; 98 ff.

¹⁵⁷Greiffenhagen (1999), p. 212 with further citations, who speaks in this context of the necessary ability to endure ambivalent situations.

Narcissistic, extremely egocentric attitudes and worldviews have spread widely in recent decades.¹⁵⁸ Social media strongly encourage this narcissism. Those who operate on social media do so only among their peers. We communicate almost exclusively with friends and people who have the same experiences, life situations and interests. Users of social media are no longer confronted with different biographies and attitudes. Disruptions due to unusual and surprising opinions are rare. One's own positions, attitudes and opinions are hardly questioned any more—and are becoming more and more entrenched. This *Facebook world* is a nice, beautiful, aseptic world where everyone likes each other because everyone is so similar.¹⁵⁹ In this way, social media act as effective filters against surprises and disruptions. Ultimately, they narrow the view of the world. Nobody has to make compromises, because there are hardly any conflicts. The result is that users—and citizens—no longer exercise their ability to change their own opinions and forge compromises.

The democratic process then becomes difficult, if not impossible. After all, it is geared precisely towards the discussion of different opinions and points of view. It thrives on the freedom and abundance of communication. Compromise is unthinkable, however, without any partial revision of opinions.

In a nutshell: democracy thrives on compromise. Yet, citizens are increasingly losing the ability to compromise. In the long run, this will lead to conflicts becoming more strident and compromise solutions being more difficult to find.

3.4 Digital Democracy: Emotions Instead of Reason?

The democratic process is changing due to social media and the increasing personalisation of the Internet. It is becoming more emotional, hysterical, non-transparent, unstructured, unpredictable. What does this mean for democracy?

3.4.1 Democracy and Reason

A least in theory, there is a close connection between democracy and reason.¹⁶⁰ The very idea of democracy is pragmatic and reasonable. Democracies are about majorities, not truths.¹⁶¹ This has the ability to diminish fundamentalist conflicts and

¹⁵⁸Dombek (2016), p. 25 ff. with further citations; Twenge and Campbell (2009), passim even speak of the “narcissm epidemic”.

¹⁵⁹See points 3.1.3. and 3.1.4 above.

¹⁶⁰See Homann (1988), p. 262 ff.

¹⁶¹For a basic account of majority voting in democracy, see Schmidt (2010), p. 268 f. with further citations.

ideological clashes.¹⁶² After all, majorities can be found with the help of reasonable methods, whilst truths—as the history of science and mankind shows—tend not to be. The concrete design of democratic processes, which is the task of constitutions, is also strongly shaped by reason. Constitutions create space for passionate, emotional political debates. However, to a large extent they control the released emotions through strict rules of the game, fixed institutions and pronounced protection of minorities. The effort to contain political emotions is particularly clear in the German constitution. The democracy that the German Basic Law seeks is a strictly representative democracy.¹⁶³ Its strong scepticism towards political emotions is the reason why there is almost no mention of direct democracy in the German Basic Law.

3.4.2 *Emotional Democracy*

Social media are in the process of emotionalising the political discourse. More emotions in democracy—what are the consequences?

Emotions have a strong influence on people's cognitive performance and behaviour.¹⁶⁴ A wealth of empirical studies now demonstrates that emotions have direct effects on the perception,¹⁶⁵ assessments and evaluations of others, the environment or risks.¹⁶⁶ Feelings thus also influence decision-making behaviour.¹⁶⁷ A—very simplified¹⁶⁸—example of this: people who are afraid show cognitive weaknesses in solving problems.¹⁶⁹ And conversely: positive emotions open up the focus of attention¹⁷⁰ and promote creative solutions to problems.

Not only cognitive functions, but also behaviour towards other people is influenced by emotions. Although the interrelationships are very complex,¹⁷¹ we can cautiously generalise that positive emotions encourage altruistic behaviour; anger¹⁷² and other negative emotions, on the other hand, tend to encourage aggressive behaviour.¹⁷³

¹⁶²Schmidt (2010), p. 270 with further citations, rightly stresses, however, that majority voting can also come up against its limits as a mechanism for conflict resolution and legitimisation.

¹⁶³For a basic account, see Grzeszick (2015), marginal no. 66–76 with further citations.

¹⁶⁴Rothermund and Eder (2009), p. 677 ff. with further citations.

¹⁶⁵For details, see Schmidt-Atzert et al. (2013), p. 242 ff. with further citations.

¹⁶⁶Schmidt-Atzert et al. (2013), p. 231 ff. with extensive further citations.

¹⁶⁷Schmidt-Atzert et al. (2013), p. 235 with further citations.

¹⁶⁸All in all, the effects of emotions on decision-making behaviour are very complex. See Rothermund and Eder (2009), p. 682 with further citations.

¹⁶⁹Schmidt-Atzert et al. (2013), p. 267 f. with further citations.

¹⁷⁰Rothermund and Eder (2009), p. 682 f.

¹⁷¹For details, see Schmidt-Atzert et al. (2013), p. 224 ff. with further citations.

¹⁷²Schmidt-Atzert et al. (2013), p. 224 f.

¹⁷³Schmidt-Atzert et al. (2013), p. 227 ff.

Democracy is characterised by competition for majorities, political power and political offices. Ideas, opinions, arguments and people compete on the public stage for the approval of citizens and voters. The idea is this: public debate enables the strengths and weaknesses of the competing individuals, ideas and solutions to be made transparent, extensively discussed and analysed in detail.¹⁷⁴ This model has two objectives. The first is *optimisation*. The aim of detailed public debate is to identify the qualitatively best solution to a political problem. At least as important, however, is the *legitimacy function* of democratic competition. All ideas and suggestions are discussed in detail and debated contentiously. Potentially all citizens can participate in this competition of ideas in different forms—at the very least through the electoral act. Only against this background is the majority democratically legitimised to assert its ideas against the minority.

However, this model of democracy requires a minimum level of rationality.¹⁷⁵ Reasonable arguments are exchanged in a rational discourse. Only in that way will the competition of ideas lead to effectiveness and legitimacy. The model is stretched to its limits when the discourse is marked by emotions, fears and hysteria. In that case it is not the best argument that prevails, but the argument with the highest potential for hysteria. Democratic processes then no longer deliver good results. When public discourse gets caught up in the vicious cycle of hysteria, the conventional model of democracy no longer works.

It is no coincidence that dictatorial regimes work much more closely with emotions than do functioning democracies. Politically invoked emotions are a highly effective instrument of power.¹⁷⁶ They facilitate manipulation. Reason and political education are the political “antidotes” of democracy.

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¹⁷⁴The importance of comprehensive democratic discourse is emphasised above all by deliberative democratic theories. For an account focusing on this, see Habermas (1992), p. 349 ff.

¹⁷⁵On the systematic relationship between democracy and rationality, see Homann (1988), p. 262 ff.

¹⁷⁶For details, see Frevert (2018), p. 18 ff. on the example of the Nazi dictatorship.

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Chapter 4

Algo-democracy. Power of Technology, Powerlessness of Democracy?



In the digital world, who sets the rules that everyone has to follow? Wide areas are dominated by algorithms created by computer scientists and software developers. This is a problem in democratic states, where the legislators are the elected parliaments, not anonymous engineers, computer scientists, technicians and software developers. Algorithms that are not democratically controlled are a problem. How can algorithms be democratically contained? It is time for politics to put this question of power in sharp focus.

4.1 Technology and Society

Complex interactions take place between technology and society. Does society control technology? Or is it the other way round? Are legal rules for technology necessary? Or should technological development be given as much free rein as possible?

4.1.1 *Interplay: Culture and Technology*

Technological progress is not an isolated phenomenon, but rather embedded in political, social and cultural contexts.¹ Scientific and technological developments are encouraged or inhibited by certain cultural framework conditions. This is one of the reasons why innovative technologies in certain regions of the world—such as Silicon Valley—develop earlier and more exceptionally than in others.² Conversely,

¹Dicken (1998), p. 146.

²See Dicken (1998), p. 172 ff. with further citations.

the technological standard of a society also influences its cultural, political and economic structure.

To this day, government action has a formative influence on the development of technology.³ On the one hand, the state promotes technological development in a targeted manner with various instruments and strategies, often at great expense. At the same time, however, it also limits technological progress for a variety of political reasons. Funding policy has now expanded from the state level to the European level: encouraging and limiting technological development is an important policy of the European Community.⁴

Economic framework conditions also play a major role in technological progress and development. Technical development also depends on the demand for goods and services on the markets.⁵ Industrial research in particular—an important driver of technological development—is subject to economic logic and is therefore very sensitive to economic influences.

The social, political, economic and cultural framework conditions therefore have a major influence on the development of technology. However, this does not mean that technological progress is *exclusively* induced exogenously. Equally important are endogenous factors—factors that result from technology and its (developmental) logic itself. New technologies emerge largely based on autonomous conditions over which society has little influence.⁶ Cognition and invention are mainly controlled endogenously and are hardly affected by exogenous factors.⁷ This changes in the following phases of technological genesis: innovation, diffusion and application of a new technology are more sensitive to exogenous influences.⁸

The relationship between technology and culture is not one-sided, but reciprocal.⁹ Both are connected by network-like interdependencies. After all, the respective state of technology and science will also shape an epoch's social structure and culture. At the same time, the interactions are very complex, so that it is often not clear who has influenced whom and how.¹⁰

Technology is not neutral.¹¹ It plays an important role in the modern world, which it (co)shapes.¹² But its influence is even greater and extends beyond the present:

³Mayntz (2001), p. 3 (13 ff.) with further citations.

⁴For detailed information on European research and technology policy, see Grande (2001), p. 368 (368 ff.) with further citations.

⁵For a detailed and differentiating account, see Mayntz (2001), p. 3 (11 ff.).

⁶Roßnagel (1993), p. 67.

⁷Roßnagel (1993), p. 68 f.

⁸Ropohl (1999), p. 296 ff., develops a general model of technological genesis.

⁹See Thompson and Selle (2000), p. 155 (156), who speak of a “mesh of society and technology”. Technological determinism, however, is different, emphasising (excessively) one-sidedly the dependence of culture on technological progress. See Norris (2001), p. 106 with further citations.

¹⁰This is illustrated in detail by Rosa, Beschleunigung (2005), p. 243 ff., using the example of social acceleration.

¹¹This is *Kranzberg's First Law*. See Kranzberg (1986), p. 545 f.

¹²Stehr (2000), p. 83 (85) with further citations.

technological innovations are also important impulses for social change.¹³ They bring about a permanent change in the world we live in and a permanent reform of the way we live our lives.

New technologies enable or facilitate new, often unforeseen¹⁴ activities, products, processes and organisations in all areas of society.¹⁵ But the impact of technology and technology on culture goes even deeper: cultural techniques influence the thinking and world view of an epoch as well as the individual world of feelings and thoughts.¹⁶ Telephones, cars, airplanes, antibiotics and contraceptives, for example, have triggered far-reaching processes of change in culture and have significantly modified social structures and behaviour.¹⁷ This also applies to information and communication technology¹⁸ and, increasingly, biotechnology.

However, the strong influence of technology on culture is not an argument for technological determinism. Of course, technology does not *determine* society and cultural change.¹⁹ Despite their *de facto* power, technological advances do not automatically and inevitably change society. The *technological imperative* is not unlimited.²⁰ There is scope for social and political control of the effects of new technologies.²¹ After all, which specific effects technology exerts (and these are always difficult to calculate) depends strongly on the use that is made of it.

4.1.2 Control? Influence of Law on Technology

The function of law is to facilitate technology and technological progress.²² Law often creates the prerequisites for technical progress. In the nineteenth century, for example, the law unleashed social and economic forces to an unprecedented

¹³Mainzer (1994), p. 511, using the example of computers.

¹⁴Dommering (2006), p. 1 (5 f.) with further citations, who in this context speaks vividly of unpredictable “revenge effects” of innovative technology. For an earlier account, see Kranzberg (1986), p. 545 f.

¹⁵Kranzberg (1986), p. 558. Preda (2006), p. 101 (110 ff.) with further citations impressively illustrates this using the example of the stock market ticker, the invention of which made modern financial markets possible.

¹⁶Mainzer (1994), p. 514 f. with further citations.

¹⁷Dicken (1998), p. 145, vividly refers to technology as the “great growling engine of change”.

¹⁸Impressive examples of the unforeseen effects of ICT technology can be found in Dommering (2006), p. 6.

¹⁹Castells (2001), p. 5, who considers the problem of technological determinism to be a false problem.

²⁰See Kranzberg (1986), p. 558 f.

²¹See Roßnagel (1993), p. 267 f., who rightly speaks of the ability and need for the law to shape technology.

²²Schmidt-Preuß (2002), p. 175 (177) with further citations.

degree.²³ In 1810 Prussia introduced freedom of trade. The old trade privileges were gradually abolished at the end of the eighteenth century and replaced by official permits. The consequences of this revolution in technical law were less arbitrariness and more legal protection. This facilitated economic activity and encouraged the onset of industrialisation. Thus, the unleashing of the economy through legal measures was also an important prerequisite for the rapid development of technology in Germany at that time.²⁴ Overall, the second half of the nineteenth century was characterised by legal liberalisation throughout Central Europe, meeting the needs of a rapidly developing industry sector.²⁵ In short: the law paved the way for industrialisation.

However, the promotion of technology by the law is not limited to liberalisation and the dismantling of bureaucratic obstacles. It is just as important for the law to offer reliable framework conditions and guarantee planning security.²⁶ It protects technology and helps it to be accepted by society.²⁷ Liability regulations and legal safety requirements also have the effect of enabling technology, but may also have the contrary effect of limiting technology.²⁸ The same applies to patent law. It protects the inventor and gives him or her security.²⁹ That can be summed up by the simple formula: without stability of law no investment, without investment no technology.³⁰

Modern law can—and must—go even further. Modern societies are under constant pressure to modernise and are highly dependent on technical innovations.³¹ For the law, promoting technology therefore also means actively providing incentives for creative and innovative action. A whole range of legal instruments exist for this, which are already being used, albeit only hesitantly.³²

In the modern constitutional state, technology does not exist in a legal vacuum. It must be constitutionally³³ and socially acceptable.³⁴ The law is therefore required to steer technology. It must help to manage the risks and consequences of technological

²³The development is outlined by Klopfer (2002), p. 57 ff. with further citations.

²⁴Klopfer (2002), p. 17.

²⁵For details, see Landes (1969), p. 197 f., who, loc. cit., p. 199 ff., speaks of “reciprocal adjustment of law and industrial capitalism”.

²⁶Klopfer (2011), p. 156 with further citations.

²⁷Schmidt-Preuß (2002), p. 180.

²⁸Klopfer (2002), p. 83 with further citations.

²⁹Hoffmann-Riem (2007), p. 389, who points out that patent law not only promotes innovation but also limits it.

³⁰Schmidt-Preuß (2002), p. 180.

³¹Hoffmann-Riem (2007), p. 392.

³²Instructive in this respect is the overview in Hoffmann-Riem (2007), p. 398 f.

³³Roßnagel (1984), p. 14, came up with the concept of the constitutional compatibility of technology and has outlined it in more detail in numerous publications.

³⁴On the social compatibility of new technologies, see von Alemann (1989), p. 24 ff. with further citations.

innovation. This also includes limiting technology in specific cases. Is this something the law is even capable of?

In the field of technology, the law has to contend with two fundamental difficulties. Law is created in the present. Yet it not only needs to work in the present, but also in the future.³⁵ In principle, it must deal with uncertainty and unknowingness. After all, technological developments and their consequences are difficult to assess. Ultimately, the law is required to regulate a technology that does not yet exist. There is therefore always a residual uncertainty on the basis of which the law must develop rules. The second problem is the pace of technological innovation.³⁶ Technical innovations emerge much faster than legal regulations. Lawmakers are (almost) always and inevitably lagging behind the technical inventor and developer.³⁷ They must therefore develop forms and instruments that enable the law to keep pace with technological developments.

It is obvious that law cannot have a determinative effect on technological development in a classical cybernetic way.³⁸ Technology is created in a highly complex process involving not only science and industry, but also political forces and heterogeneous social groups. Such developments are too multifaceted and complex to be precisely guided and comprehensively controlled and dominated by a mechanism as limited as the law.³⁹ What is possible, however, is technology selection and technology design.⁴⁰

The law can choose between several alternative technologies and thereby control further technical development.⁴¹ Criteria other than technical ones, such as constitutional, political or economic criteria, can—and must—be applied. Examples of such *technology control through technology selection*⁴² are, for example, nuclear phase-out⁴³ or a decision on a climate-friendly energy supply.

A second lever for technology control through law is the possibility of exerting binding influence on the *design* of a concrete technology.⁴⁴ Legal requirements are translated into concrete “safety philosophies” or “specifications”, which have to be put into practice by technology. There are many examples of this. The basic right of informational self-determination and the principle of strict purpose limitation have

³⁵On this problem, see Appel (2004), p. 329 with further citations., who, loc. cit., p. 352 f. concisely speaks of a *futurisation of law*.

³⁶Berg (1985), p. 401 (401) with further citations.

³⁷Scherzberg (2002), p. 113 (122) puts it in a nutshell: in principle, the law was “in arrears”.

³⁸Roßnagel (1993), p. 27 with further citations. Along similar lines, Spinner (2002), p. 40.

³⁹Roßnagel (1993), p. 27 with further citations.

⁴⁰Roßnagel (1993), p. 27, who elaborates in detail loc. cit. p. 256 ff. with further citations.

⁴¹Roßnagel (1993), p. 256.

⁴²Roßnagel (1993), p. 27, 256 ff. with further citations, coined the term and the concept.

⁴³Schmidt-Preuß (2002), p. 175 (187). For details of the German Nuclear Phase-out Act (*Atomausstiegsgesetz*), see Roßnagel (2007), p. 156 ff. with further citations.

⁴⁴Roßnagel and Laue (2007), p. 548 f., use the concrete case of the data protection law principle of purpose limitation in electronic government to outline how technology design could—and should—function through law.

left their mark on ICT technology. In electronic government, what are known as the standards and architectures for e-government (SAGA)⁴⁵ are significant. An example from environmental law: the requirements that waste legislation has placed on waste management have shaped the development of disposal technologies. The idea of recycling management⁴⁶ has flowed from the law into the development process for waste technology and has influenced the design of modern waste technologies.

The extreme case of technology control is prohibition. Indeed, the law can massively hinder the development of new technologies.⁴⁷ A current, striking example of this is the ban on reproductive human cloning. In practice, however, complete bans on a particular technology are very rare.⁴⁸ Whether new technologies can be completely suppressed by bans is somewhat doubtful. In the history of science, no example can be found for a long-term and permanent prevention of technological progress, with the exception of individual cases of limited duration.⁴⁹

4.1.3 *Necessity? Legal Rules for Technology*

Whenever a new technology develops and asserts itself, the legal question will arise sooner or later: are legal regulations necessary? Whether regulations are necessary as a matter of principle depends on (at least) two factors: the function of the law and the particularities of the technology concerned.

The question of what functions the law has will attract very different and differentiated answers.⁵⁰ However, there is broad agreement on two functions. Law should control the behaviour of citizens, and it should resolve conflicts.

Law should control people's behaviour, attitudes and expectations in such a way that conflicts are avoided.⁵¹ It should be directed at areas where conflicts exist or are to be expected. Where there are no conflicts, there is no need for law. A classic task of law is to distribute scarce assets (fairly). Of course, even the best and most forward-looking legal system cannot avoid all conflicts. This is where the second important function of law comes into play. It also has the task of resolving conflicts that have arisen. Whether technical innovations require legal regulation thus depends on how high their conflict potential is.

⁴⁵On the details: https://www.cio.bund.de/Web/DE/Architekturen-und-Standards/SAGA/saga_node.html. (28/8/2019).

⁴⁶Kloepfer (2004), p. 1722, rightly speaks of a paradigm shift towards an effective and resource-conserving closed-loop or material-flow economy, which the law has implemented. However, economic practice is still a long way from achieving this goal.

⁴⁷Kloepfer (2002), p. 86, considers the limitation of technology—alongside the enablement of technology—to be a main function of technology law.

⁴⁸Kloepfer (2002), p. 96.

⁴⁹Perrin (1996), p. 96 ff. and 123 ff., describes two striking examples.

⁵⁰Rehbinder (2014), marginal no. 96 ff.

⁵¹Rehbinder (2014), marginal no. 100.

Conflict research deals in an interdisciplinary and intensive manner with the question of what leads to conflicts.⁵² It has identified an abundance of different causes of conflict. Going into this in more detail here is beyond the scope of this work. Instead, a few basic considerations on the emergence of conflicts should suffice.

In principle, conflicts arise when different actions are confronted with interests, expectations, goals, characters or persons that are—or appear to be—incompatible.⁵³ Differences are therefore not *per se* a cause of conflict. The decisive factor is the apparent or real incompatibility of the differences. Conflict therefore occurs above all when differences cannot be tolerated.

Whether contradictions are or appear incompatible depends, among other things, on how important the area in which differences exist is to the parties to the conflict.⁵⁴ In short: when trifling matters are at play, differences can be easily tolerated. This is much more difficult for important, fundamental goals, characteristics and expectations. Differences become particularly conflict-ridden when they are emotionally charged.

4.2 From *Code Is Law* to *Law Is Code*

Because in its early days the Internet was primarily a technical phenomenon rather than a political or social one,⁵⁵ engineers and computer scientists dominated the technical and political development of the Internet.⁵⁶

4.2.1 *Technology Instead of Politics: The Law of the Nerds*

Parliaments are often reluctant to legislate in highly technological areas of society.⁵⁷ A key, but not exclusive, cause is definitely the aforementioned fundamental difficulty of controlling technical developments by law. Legal restraint has far-reaching consequences. Self-regulation dominates in the field of technology,⁵⁸ leading first to

⁵²For detailed information on the various facets of peace and conflict research, see Koppe (2010), p. 18 ff. with further citations.

⁵³See Myers (2008), p. 673.

⁵⁴Bonacker and Imbusch (2010), p. 70 ff.

⁵⁵On the history of the development of the Internet, see Sieber (2000), marginal no. 1 ff. with further citations.

⁵⁶Hofmann (2000), p. 71.

⁵⁷This was different at the genesis of technology law in the nineteenth century. See Vec (2011), p. 48 with further citations.

⁵⁸For a detailed account of the self-regulation of technology, see Kloepper (2011), p. 179 ff. with further citations.

the mechanisation of standards and then to the mechanisation of thinking as a whole. This is especially true of the Internet.

Until the beginning of the 1990s, the Internet community was primarily concerned with the development and updating of technical standardisation, especially of network and application protocols.⁵⁹ Political and ethical issues played only a minor role, if at all. To this day there exist a whole series of committees in which experts set technical standards and thus further develop the architecture of the Internet.⁶⁰ In addition to the hardware standards, the network's software architecture⁶¹ plays an extremely important role.⁶² The ever-evolving Internet architecture determines and gives an initial shape to cyberspace and thus the actions and opportunities of Internet users.⁶³ The basic technical standards and infrastructures can be described as a *digital code*.⁶⁴ Speaking in the categories of power-focused sociology: the technical committees and the programmers exercise *data-generating power*.⁶⁵ They hold the power of technical production: through their software and technical standards, they shape a part of the world that is becoming increasingly important. The "data subjects"⁶⁶ are confronted with this and have to adapt. After all, it is they who have to use the technical structure and the software without being able to change it.⁶⁷

Technical self-regulation of the Internet can lead to fast, flexible and globally uniform regulations that are able to tackle the issues before them.⁶⁸ "Digital standards" arise from technical application. They are therefore particularly well adapted to the practical needs of the Internet. They can be implemented and enforced

⁵⁹For a detailed account, see Sieber (2000), marginal no. 42 ff. with further citations. Hafner and Lyon (2000), p. 165 ff. give a vivid account of how the development of Internet protocols began at the end of the 1960s. The history of technical and legal standardisation is older. See Vec (2011), p. 47 ff. with further citations.

⁶⁰Tanenbaum (2000), p. 89 ff. provides a concise overview of the committees. For general information on the benefits and problems of technical standards, see Roßnagel (1996), p. 1181 ff. with further citations.

⁶¹On the concept of network architecture, see Tanenbaum (2000), p. 34 f.

⁶²Goldsmith (1998), p. 1213 with further citations.

⁶³Similarly, Teubner (2003), p. 23. Also, Longworth (2000), p. 27, who describes the network protocols as "primary rule makers", and Reidenberg (1996), p. 917.

⁶⁴Mitchell (1996), p. 111, emphasises the significance of code as a law for virtual space: "code is the law." Earlier, Weizenbaum (1978), p. 311 ff. and passim, warned of the "power of computers".

⁶⁵The term was coined by Popitz (1992), p. 31. By this he means the power that is exercised by producing things, artefacts, data, the use of which binds people. Whoever generates the data determines how those affected by the data can and must react. An indeterminate number of people are confronted with "faits accomplis". This is the "power of the data generator". See Popitz (1992), p. 180.

⁶⁶Popitz (1992), p. 30, speaks of "data generators" and "data subjects".

⁶⁷Technical objects are usually intended for use. See Popitz (1992), p. 161 f.

⁶⁸Concrete examples cited by Roßnagel et al. (2001), p. 153 ff. with further citations, but specifically related to the area of data protection. Goldsmith (2000), p. 203, also stresses the efficiency of technical self-regulation on the Internet.

electronically and hence highly efficiently.⁶⁹ In contrast to state legislation, national borders and complex, time-consuming legislative procedures play no part in the (further) development of digital code.⁷⁰

Just as legal regulations and social norms influence life, digital code shapes life in cyberspace. In other words, it is the law in the *City of Bits*.⁷¹ However, it has one fundamental peculiarity: unlike laws or social norms, one cannot escape it. In this respect, it corresponds more to a law of nature than to a structure of standards created by man.⁷² Nevertheless, it is of course developed and put into effect by humans. The digital code of cyberspace can—and must—therefore be politically controlled and modified⁷³—within the limits of what is technologically possible. In other words: in democracy, any exercise of power is limited. This is a basic idea of democratic theory. Of course, this must also apply to the power of *the data generator*.⁷⁴

To put it somewhat provocatively: what is possible in cyberspace has thus far not been defined by democratically legitimised legislators, but by technical standards⁷⁵ and software. Engineers and programmers become lawmakers; *Wintel* becomes a legislator.⁷⁶ This is highly problematic, not least from the point of view of democratic theory. In view of the importance of the Internet, decisions about Internet architecture are automatically very political and highly explosive for politics, society and the economy. Technical decisions therefore not only have technical, but also political consequences.⁷⁷ This is not a new phenomenon, either, but one that has largely been overlooked so far. The political power of design is well known from urban planning, for example.⁷⁸ What is planned and built influences people's behaviour and everyday life.⁷⁹ It makes a difference whether you build a motorway or a hiking trail.

⁶⁹Perritt (1997), p. 420.

⁷⁰Similarly, Perritt (1997), p. 420. For detailed information on defining rules in the technical committees of the Internet, see Ahlert (2003), p. 55 ff.

⁷¹The concise formulation by Mitchell (1996), p. 111.

⁷²Lessig (1996), p. 896 f.

⁷³Lessig (1996), p. 900 with further citations, and Dommering (2006), p. 13 ff.

⁷⁴For a detailed account of the power of data generators, see Popitz (1992), p. 30 ff., 180.

⁷⁵On the increasing importance of technical standards, especially with regard to effective compatibility, see Kim and Hart (2002), p. 146 and Roßnagel (1996), p. 1181 ff. with further citations.

⁷⁶The term *Wintel* (Windows + Intel) has become established in the international political economy to characterise the technological and economic power of PC manufacturers and software producers. For details see Kim and Hart (2002), p. 143 ff. with further citations.

⁷⁷See Reidenberg (1996), p. 917 f., who underlines the political consequences of technical (software) decisions.

⁷⁸Pariser (2012), p. 183.

⁷⁹Winner (1980), p. 124 f. with numerous striking examples.

4.2.2 *Excursus: Social Psychology of the Nerds*

The *de facto* power of software engineers, developers, programmers—the nerds—has increased. They not only make technical decisions, but also—whether they like it or not—political decisions with far-reaching consequences. What criteria do they base their decisions on? What are their political and moral standards?

Generalisations and typifications are highly problematic. They often lead to stereotypes that distort the view of reality. As always, there is no such thing as *the* software engineer or nerd. Nevertheless, it is possible to sketch—roughly—attitudes and values that occur frequently in the world of software development. Every profession cultivates specific ways of thinking and characteristic values. Nerds are all about technical efficiency and mathematical systematisation.⁸⁰ These are the tools with which they program software—and change the world. Their habitus is shaped by the pragmatics of programming and the mathematical aesthetics of technical architectures.⁸¹ For them, the computer is the instrument with which they can achieve any goal—through creative software written by a nerd.

Software architectures can be incredibly complex. Nevertheless, mathematics-based systematic thinking is able to control and steer them. This approach feeds the illusion that systematisation and reduction enable every system to be created and controlled anew.⁸² However, the world and people function differently and cannot be understood or controlled with these methods.

Nerds cultivate an apolitical, often even anti-political attitude⁸³ blended with a certain *technodeterminism*. For them, technology is the (only) true driving force behind all major social changes. It “will get what it wants, whether we want it or not”.⁸⁴ This *political agnosticism*⁸⁵ relieves them of ethical and political responsibility. They do not have to deal with the impact of the technology they themselves created. The problem of the ethical responsibility of seemingly apolitical scientists is not new. In the case of the nerds, however, it has a new explosive power. They implement their world views in the software structures that shape the entire world without this being transparent.

4.2.3 *Nerd Law and Constitution*

The self-regulation of the Internet by Internet companies and their programmers is not only limited by technical and structural factors. The law itself—especially

⁸⁰Pariser (2012), p. 180. Similarly, Kranzberg (1986), p. 550 f.

⁸¹Coleman (2004), p. 511.

⁸²Pariser (2012), p. 182 f.

⁸³Pariser (2012), p. 186 with further citations.

⁸⁴Kelly (2011), p. 15 ff. speaks in this context of “Technium” as an independent force.

⁸⁵This term was coined by Coleman (2004), p. 509 f.

constitutional law—naturally also draws boundaries that need to apply in cyberspace, too.

Technology and engineers are of great importance in the (further) development of technology law. The almost inevitable predominance of the two groups leads to a skewing within legislation and is ultimately reflected in the content of the technical standards. The dominance of technicians and technical thinking is almost impossible to change within the framework of technical self-regulation. Non-technical thinking and interests outside the *technical community* can only be integrated through state, supranational and global law.⁸⁶ A good example of this is the Internet.⁸⁷

Unlike in state or supranational law, the common good is not a relevant category in the digital code. As a rule, technical regulations are not well-placed to prevent strong individual interests from prevailing over weaker individual interests or the general interest.⁸⁸

Ultimately, self-administration cannot compensate for the inequalities in economic, social and political might that also exist on the Internet and in Internet communities. On the contrary: the existing inequalities are reflected in the content of the self-created, technically oriented rules. The digital code does not necessarily guarantee the necessary protective rights for the weak or minorities. It is traditionally the task of the state and its (constitutional) law to cushion and compensate for power differences under overriding public welfare aspects and to balance conflicting interests. State law solves this conflict—constitutionally speaking—by establishing the practical concordance between the contradictory constitutional provisions. The classical function of the (democratic) state is to guarantee the protection of minorities and to represent general interests. Technical self-administration is hardly in a position to do this—neither on the Internet nor in other areas of technical law.

Access to the Internet in general, and to specific content in particular, is a particular aspect of the general interest issues on the Internet. Private operators and communities make *access*⁸⁹ dependent on different legal, social or economic conditions.⁹⁰ This is not a special feature of cyberspace. In *real life*, too, there are different areas with different access rights.⁹¹ Physical boundaries that cannot be crossed by everyone at the same time shape the world.

When borders are drawn—in real life and in cyberspace—a fundamental conflict arises that can only be solved by state law, but not by rules of technical self-administration. Individuals and communities naturally have the right to draw borders

⁸⁶Roßnagel (2004), p. 23 f.

⁸⁷As Kesan and Shah (2005), p. 322 ff. with further citations, show in detail, the law can certainly influence the design and further development of the digital code.

⁸⁸This is a fundamental weakness of private legislation in technical law. See Kloepper (2011), p. 189 with further citations.

⁸⁹Access is becoming a key problem in modern knowledge societies. For a fundamental account, see Rifkin (2000), *passim*.

⁹⁰Sassen (2000), p. 153 ff. analyses the emerging “cyber segmentations” in detail.

⁹¹Lessig (1996), p. 889.

and exclude others. Access restrictions also structure and regulate the world—and the Internet—as a whole. However, this is then no longer a question that can be left to private special interests. Above all, this *zoning*⁹² must not lead to intolerable discrimination and disadvantage or minorities. Whether and to what extent a society accepts a *digital divide* is a highly political question that cannot be solved with technical expertise. In a democracy, the parliament must resolve these conflicts of interest.

4.2.4 *Environment Rights as a Tool*

Law that is directly and immediately “written” into the code would be particularly effective in controlling digital processes. Such environment law is developing right now. An early—and highly problematic—example of this can be found in the Chinese version of the Google search engine, which was used until 2010.⁹³ At that time Google had programmed the censorship regulations of the Chinese state into its search routines. Censored pages were not shown to Chinese users. There were also no indications that pointed out the censorship to the users. Another example would be software agents programmed to observe certain rights and duties.⁹⁴ Specifically: in digital contractual relationships, software agents could manage the personal data of customers, view the terms of use automatically and give—or refuse—appropriate consents on behalf of customers.

As plausible as this sounds, it is difficult to implement in detail. Many values and legal concepts are so abstract that they are difficult to translate into concrete coding. To depict the concept of human dignity in a mathematical function, for example, is a challenge that is hard to underestimate. The result is that the execution of the code by the machine leads to misunderstandings, conceptual shifts in the meaning of concepts or even distortions of content.⁹⁵

4.2.5 *The Scored Society*

Profiling and scoring by autonomous intelligent machines with the help of big data is a promising application that brings with it high hopes. It is rapidly gaining importance in practical applications.⁹⁶ Big data’s great promise is that if only the quantity of data collected is large enough, objective statements about reality can be derived

⁹²Lessig (1996), p. 883, speaks of *zoning* in this context.

⁹³For details, see Hofstetter (2016), p. 438.

⁹⁴Spiekermann and Novotny (2015), p. 462.

⁹⁵Hofstetter (2016), p. 440.

⁹⁶For details, see Lischka and Klingel (2017), p. 8 ff. with further citations.

from it. *With enough data, the numbers speak for themselves.*⁹⁷ The goal of scoring with the aid of big data is to obtain personal profiles from a large quantity of seemingly unimportant data. These profiles can then be used to predict behaviours, preferences and interests.⁹⁸ An example of this is *predictive policing*.⁹⁹ In the future, special software will be able to predict the time and place of criminal offences if it has the corresponding amounts of data available. This potentially revolutionary consequences for police work and for society have barely been examined to date.¹⁰⁰

Scoring is becoming increasingly important in the financial and insurance sectors. The idea is to use software to automatically and accurately determine the creditworthiness of potential borrowers.¹⁰¹ *Predictive analytics* is also increasingly being used in medicine. One example is the prediction of epidemics and their progression.¹⁰² HR departments are discovering scoring for recruiting new employees and developing junior staff.¹⁰³

The method of choice for profiling and scoring is—very simply—classification.¹⁰⁴ Individuals are categorised based on abstract criteria. The individual's classification within a category is then used to draw conclusions about their future behaviour.¹⁰⁵ An example: if you live in a residential area populated by many unemployed people and social-welfare recipients, you are also likely to have little money available. This allocation is then used to deduce the result: there is an increased likelihood that you will not be able to repay loans. In other words: the postcode of a residential address is used to determine the creditworthiness of the resident. He or she is given a corresponding credit score—and no credit. Another example: people who take advantage of marriage counselling get a worse credit score.¹⁰⁶ The background to this is that divorces are more likely to lead to financial difficulties and thus credit defaults. Of course, banks may not ask their customers for such intimate details. However, they can buy data from data brokers on the information markets.¹⁰⁷ These are relatively simple examples. With the help of big data techniques, this can be extremely sophisticated and automated.¹⁰⁸

⁹⁷Anderson (2008).

⁹⁸Siegel (2013), p. 26. An overview of the possibilities of *predictive analytics* is provided by Siegel (2013), p. 143 ff.

⁹⁹For a basic account, see Uchida (2014), p. 3871 ff. and Siegel (2013), p. 51 ff. On the status of application in Germany, see Gluba (2016), p. 53 ff. On the status of development in the USA, see Lischka and Klingel (2017), p. 12 f. with further citations.

¹⁰⁰See Brayne (2017), p. 9985 ff; 997 ff.

¹⁰¹Pasquale (2015), p. 23 with further citations. Examples in Siegel (2013), Table 3.

¹⁰²Mainzer (2016), p. 160 with further citations.

¹⁰³Pasquale (2015), p. 35 ff.

¹⁰⁴See Hofstetter (2016), p. 379 ff.

¹⁰⁵Schäufele (2017), p. 8 f. with further citations.

¹⁰⁶Pasquale (2015), p. 31 with further citations.

¹⁰⁷For details, see Pasquale (2015), p. 32 ff.

¹⁰⁸See Lischka and Klingel (2017), p. 31 ff. with further citations.

From a technical, IT-oriented perspective that focuses on increasing efficiency, profiling and scoring are undoubtedly valuable tools. It is little wonder that scoring is being extended to more and more areas. We are well on our way to becoming a *scored society*.¹⁰⁹ The assessment is completely different when constitutional and democratic aspects are taken into account. In this respect, profiling and scoring are an impressive example of the gap between technical and legal-political thinking.

The fundamental idea of classification is diametrically opposed to human dignity. Human dignity means respecting the individuality of each human being. Normality is not the yardstick by which people may be measured, but rather their very specific individuality with all the peculiarities that specifically cannot be classified. The classification approach is completely different: each person becomes de-individualised and part of a class that has common, consistent characteristics. People become an object classified by a statistical method.

The classification method also stands in potential conflict with a fundamental idea of democracy: the protection of minorities. In a democracy, political power is exercised by the majority. This is the idea of popular sovereignty—applied in political practice. However, the power of the majority is not limitless: Western constitutions generally include effective protection of the minority. Even large majorities must not violate the human dignity of the minority. In other words: democracy generally accepts deviant behaviour¹¹⁰ as completely legitimate. Deviance¹¹¹ is not a flaw in democracy.

This is fundamentally different with *scoring* and *profiling*. Both procedures are designed to detect deviations from a standard. The deviation is converted into a certain value, known as the *score*. The score then becomes the basis for decisions and far-reaching consequences. An example from the financial sector: whether someone receives a loan or not is increasingly decided on the basis of the score.¹¹² The trend towards using credit scores for other purposes is problematic.¹¹³ In the USA, such scores are also used to calculate insurance premiums or award jobs.¹¹⁴ Scoring as a whole is increasingly being used in more intimate areas as well. Nowadays there are completely non-transparent health scores that open the floodgates to manipulation and abuse.¹¹⁵

Of course, such classifications are not new. People have always classified and categorised. Human social behaviour is hardly possible without assessing and classifying events and people. Classification is a basic method of science. Banks

¹⁰⁹Pasquale (2015), p. 25 with further citations.

¹¹⁰See Lamnek (2018), p. 47 ff. with further citations, on the different ideas of what deviant behaviour actually is.

¹¹¹Still a fundamental work on deviance research: Becker (1981), p. 17 ff. and passim. Lamnek (2018), p. 59 ff. with further citations gives an overview of the research.

¹¹²Lischka and Klingel (2017), p. 31 f. with further citations.

¹¹³Pasquale (2015), p. 191 with further citations.

¹¹⁴Lischka and Klingel (2017), p. 33 with further citations.

¹¹⁵Pasquale (2015), p. 26 ff. with further citations describes disturbing examples.

and retailers have always had to (be able to) assess the creditworthiness of their customers. However, classifications by the algorithmised analysis of big data exhibit feature certain particularities.¹¹⁶ Big data is profoundly changing the quantity and quality of classifications. Everything is potentially always being scored. Scores are determined by anonymous instances—or algorithms—and imbued with the magic of numbers.¹¹⁷ We are on our way to becoming a scored society.¹¹⁸

The effect is further enhanced by the so-called *automation bias*.¹¹⁹ People tend to trust automated decisions of computers too much.¹²⁰ In case of doubt, they consider computer-generated decisions to be correct—even and especially when they are wrong.¹²¹

In concrete terms this means that a computer works out a score using algorithms. Because this score is a number and was calculated by a computer, it is barely questioned critically or called into doubt. Scores become threatening and incontestable. In other words: the deviation from the standard expressed in a numerical value becomes the basis of state and private decisions. This makes people and their lives computer-compliant. Yet, this *rule of scores* stands completely counter to the idea of man anchored in the German Basic Law as well as the idea of the protection of minorities in democracy.

What does this example show? The logic of computer science is different from the logic of the constitution. Without active legal intervention, the values and principles of the constitution will not write themselves into the algorithms of software developers. This is the current challenge facing the law in the age of increasing digitalisation.

4.2.6 Law Is Code. *Digital Code vs. Democratic Law*

Nerd law is invaluable. It is simply incredibly efficient and problem-oriented. At the same time, however, state, supranational and global¹²² law-making is still necessary¹²³ to pursue general interests and protect minorities and vulnerable people. This task can only be fulfilled by democratically established law enforced by public authority. The—inevitably and legitimately—limited and one-sided technical law

¹¹⁶Mainzer (2016), p. 159 with further citations.

¹¹⁷On the magic and special credibility of numbers, see Porter (1995), p. 11 ff. and *passim*.

¹¹⁸Pasquale (2015), p. 25.

¹¹⁹The term was developed by Mosier and Skitka (1996), p. 205. For a fundamental approach, see also Parasumaran and Riley (1997), p. 239 f.

¹²⁰Mosier and Skitka (1996), p. 205 ff.

¹²¹On the deadly consequences of wrong classifications, see Hofstetter (2016), p. 387f. with further citations.

¹²²Because the Internet ignores national borders, state law must necessarily be global.

¹²³This was emphasised early on by Goldsmith (1998), p. 1215 f.

of the nerds cannot do this. An example: algorithms that make recommendations are in the first instance a technical problem. They are therefore a task for software developers and engineers. However, recommendations also have far-reaching social, political, economic and cultural implications. Because of this political significance, they are relevant to democracy. Thus, they do not only fall into the sphere of competence of the nerds, they are also subject to social and state rules. Does the algorithm work from a technical perspective? This is the question for private software developers. Is the algorithm fair and constitutional? That is the question that politics and society must answer.

The hierarchy between democratic and technical law must be clear in view of the division of labour. Law cannot control technology in the cybernetic sense. In other words, it cannot steer technical development in a target-oriented manner, control it comprehensively and master it. The process of technological development, design and dissemination is far too complex for this. However, (constitutional) law must not leave the development of technology to its own devices. So the road map is clear: It must lead from *code is law* to *law is code*.¹²⁴

In order to fulfil its function as technology *leader*—not in the narrower sense as technology *controller*—law must be transformed into technology. Legal content and concepts need to be translated into technical terms to enable technical control.¹²⁵ This is a challenge that lawyers alone cannot meet. This requires close cooperation between (at least) technicians, computer scientists and lawyers. If the law does not fulfil this task, it has no influence: technology then develops according to its own rationality and in accordance with technologically inherent criteria, without observing the law.

The question of the interaction between democratic law and private nerd law cannot be answered in isolation for the national level. The result of the triumph of digital technology is a decline in the significance of national, geographical borders. At present, a complex global administrative and legislative structure is developing that involves nation states, international institutions and private organisations in equal measure. Global governance is by no means merely emerging in relation to the Internet: new regulatory and administrative structures in which different public and private actors participate are being developed and established through cross-border, global networks.¹²⁶

However, the balance between the technical self-regulation required for reasons of efficiency and the state legislation required for the common good has not yet been found. National states find cross-border legislation much more difficult than private actors. The emergence of a global regulatory structure has thus so far been dominated by private, technocratically oriented regulations. For this reason, global law is

¹²⁴The *distributed ledger technologies* and *smart contracts* seem to lead back to transposing legal rules in technical rules. For details see De Filippi and Hassan (2016) and Weber (2018), S. 701 ff.

¹²⁵Roßnagel (1993), p. 254 ff. with further citations, who coined the term *transformation work* in this context.

¹²⁶For a critique from a national perspective, see Seckelmann (2007), p. 39 ff. with further citations.

very largely private law, which is bound to special interests. In contrast, a global law created by states and democratic institutions that is geared towards the international common good has so far tended to exist in a more incipient form.

Against this background, the political dispute over globalisation and digitalisation is also a process of striking a balance between private and state legislation at the global level. Ultimately, the aim is to redefine the relationship between the state and civil society in the face of the challenge of globalisation and digitalisation.

4.3 Democracy Through Technology?

Digital technology in general and the Internet in particular harbour considerable democratic potential.¹²⁷ At the same time, they also pose risks to democracy.

4.3.1 *An Ambivalent Relationship: Technology and Democracy*

Technical innovations have a strong impact on cultural, political and social developments. Of course, the democratic system is not immune from this. Technology and engineering pose a risk to democracy. Technical constraints create a dynamic that political decision-makers often find difficult to escape. This leads to the danger of the will of the people being replaced by the technical constraint.¹²⁸ Political, democratically legitimised norms are replaced by scientific and technical constraints with little or no democratic control and legitimacy.¹²⁹

However, the relationship between culture and technology is more complex: technological progress is also an opportunity for democracy. Digital technology and the Internet in particular harbour considerable democratic potential.¹³⁰

¹²⁷ Similarly Rosenau (1998), p. 46 f., with further citations.

¹²⁸ For an early, far-sighted account, see Schelsky (1965), p. 453. For general information on the technocratic threat to democracy, see Beck (1988), p. 268 ff. For a fundamental and critical account of the phenomenon of factual constraints, see Hair (2004), p. 139 ff. with further citations.

¹²⁹ Schelsky (1965), p. 453 f. sketches out how the influence of technology on the state and its standardisation is gradually increasing.

¹³⁰ Similarly Rosenau (1998), p. 46 f. with further citations. For a highly critical approach, see Hindman (2009), passim.

4.3.2 *Democratic Visions: Electronic Democracy*

Will digital technology, the Internet and social networks lead to more and better democracy? There are thoroughly positive visions of *electronic democracy*¹³¹ that see enormous opportunities for democracy. The concept of electronic democracy has emerged especially in the USA.¹³² The discussion about the democratic potential contained in digital technology and the Internet is now taking place worldwide.

Some even consider the Internet to be “inherently democratic”.¹³³ The cyberoptimists expound above all the *mobilisation thesis*, which predicts that the technical possibilities of the Internet will greatly facilitate political engagement and thus lead to the mobilisation of new population strata that have so far had little political involvement.¹³⁴ The exponents of this thesis assume that the boundless communication possibilities will actually lead to increased democratic communication.¹³⁵ Political blogs, social networks or global information and discussion forums such as Wikipedia¹³⁶ are examples of the hugely expanded possibilities of political journalism and communication.¹³⁷ There is a striking correlation between states that are democratically governed and at the same time highly networked in terms of information technology. However, whether this correlation is coincidence or whether there is a causal connection between democracy and information technology has not been conclusively demonstrated.¹³⁸

The cyberpessimists, who lean towards the *reinforcement thesis*, are much more sceptical.¹³⁹ They expect *politics as usual*¹⁴⁰: according to this hypothesis, the improved technical possibilities are used by those who are already politically engaged. The sceptics consider new and additional democratic participation to be unlikely.¹⁴¹ New technologies tend to reinforce existing interests, preferences and

¹³¹ On the concept, see Kneuer (2013) p. 16 ff.

¹³² For a detailed account, see Hagen (1999), p. 69 f.; Neymanns and Buchstein (2002), p. 10 f.; Zittel (2000), p. 905.

¹³³ Diaz (2008), p. 13 with further citations.

¹³⁴ See e.g. Froomkin (2004), p. 9 ff. On the mobilisation thesis, see Norris (2001), p. 218 with further citations.

¹³⁵ An example of this is Froomkin (2004), p. 10 ff. Kneuer (2016), p. 667 with further citations, gives a critical overview of the different representatives of the mobilisation thesis. N. Entman and Usher (2018), p. 303 ff. are more sceptical.

¹³⁶ For a detailed account regarding Wikipedia, see Pentzold and others (2007), p. 63 ff. with further citations, and Möller (2005), p. 169 ff.

¹³⁷ On the democratic function of blogs and wikis, see Froomkin (2003), p. 859 ff. with further citations. However, the results of Hong and Kim (2018), p. 388 ff., are very sobering and show empirically that search engines force readers to concentrate on a few, large media.

¹³⁸ For a basic account on the research requirements, see Kneuer (2016), p. 667 f. For a detailed account, see Kedzie (1995).

¹³⁹ On the reinforcement thesis, see Norris (2001), p. 218 with further citations.

¹⁴⁰ Margolis and Resnick (2000), p. VII.

¹⁴¹ For example, see the explicit account by Margolis and Resnick (2000), p. 207.

behaviour patterns.¹⁴² Initial empirical studies also tend to support the reinforcement thesis.¹⁴³ However, comprehensive investigations are not yet available.¹⁴⁴

However, perhaps both schools of thought are still too optimistic. The Internet also poses a considerable threat to democracy.¹⁴⁵ Or another possibility: perhaps communication in democracy will not become better or worse, but just fundamentally *different*. The presidential elections of 2016 in the USA can be read as a disruptive example. They were completely different from any previous elections.¹⁴⁶

In reality, at any rate, electronic democracy has not yet established itself. Although there is a plethora of different limited pilot experiments in which new forms of political, democratic communication are being tested in real-life scenarios,¹⁴⁷ the democratic potential of digital technology and the Internet has not yet been fully exploited.¹⁴⁸

Regardless of whether the Internet can merely strengthen existing engagement or mobilise new engagement: the Internet and digital technology will significantly modify the forms of political communication.¹⁴⁹ Every area of classical political communication is affected.¹⁵⁰

4.3.3 *Participation in Digital Democracy*

Political participation is a—if not *the*—core element of democracy. The ability of citizens to participate politically is the essence of democracy. Democracy is inconceivable without elections, election campaigns, activities of political groups and individual political contacts. Political decisions in democracy are legitimised through participation.

¹⁴²On this thesis, see Norris (2001), p. 217 ff.

¹⁴³For details, see Norris (2001), p. 39 ff. with further citations. Lindner (2005), p. 838, provides a reserved assessment of the importance of the Internet for democracy on the basis of empirical data on the Internet-based communication of Canadian parties and interest groups.

¹⁴⁴Kneuer (2016), p. 667.

¹⁴⁵For detailed information, see this chapter and Chaps. 3 and 5 in this volume.

¹⁴⁶Persily (2017), art. 71 and passim.

¹⁴⁷Neymanns and Buchstein (2002), p. 16, develop a typology of the pilot experiments. On recent pilot experiments developed under the label of “Open Government”, see Froomkin (2003), p. 869 ff. with further citations.

¹⁴⁸Norris (2001), p. 237 f. with further citations. Similarly, Schmitt-Beck et al. (2005), p. 852 f., who, on the basis of empirical studies, state that only a very small “information elite” makes use of the information available on the Internet.

¹⁴⁹Norris (2001), p. 191; Neymanns and Buchstein (2002), p. 10.

¹⁵⁰Neymanns and Buchstein (2002), p. 10.

The Internet and digital technology offer potential for simplifying citizens' participation in political processes.¹⁵¹ Social media provide billions of people with ready access to political information and discussions.¹⁵² But does this really lead to more and better political participation?

The architecture of the Internet has amazing similarities with the "architecture of democracy".¹⁵³ The architecture of the network, which essentially consists of technical standards and protocols, is basically heterogeneous, decentralised and open: it offers potentially unlimited opportunities for participation. However, this does not imply that the Internet *per se* is democratic.¹⁵⁴ On the contrary: the Internet has an authoritarian potential that is realised not infrequently.¹⁵⁵

This has a socio-psychological and a technical dimension. In social networks, it is above all people who are similar and represent similar positions and interests who come together.¹⁵⁶ Group membership is therefore based on conformity. This has a psychological effect: those who no longer conform no longer belong to the group. In social psychology, exclusion from a group is difficult to bear,¹⁵⁷ which is why there is such high pressure to conform on social media. This is not a good basic condition for democratic pluralism and objective controversy. This also applies to the technical possibilities of surveillance offered by the Internet, which are extensively used by authoritarian regimes.¹⁵⁸

A technology is not democratic *per se*.¹⁵⁹ Whether a technology is democratic or not depends on how it is used. This also applies to the Internet. However, the structural similarity between democracy and the Internet shows that in principle the Internet has a democratic potential. It can be an effective instrument for improving democratic participation and political decision-making.¹⁶⁰

At the same time, however, online participation is not without risk. It is possible that effective and proven forms of participation are replaced¹⁶¹ by ineffective and superficial *clicktivism*.¹⁶² One further, very fundamental, question that remains to be answered: is it even possible to have objective and civilised political discussions

¹⁵¹Sarcinelli (2013), p. 118 with further citations.

¹⁵²Tucker and others (2017), p. 48 f. with further citations.

¹⁵³Similarly, Ahlert (2003), p. 57.

¹⁵⁴Schwark (2003), p. 97 f. with further citations, who speaks in this context of the "essentialist fallacy".

¹⁵⁵Tucker and others (2017), p. 50 ff. with further citations. Examples of this can be found in China, Singapore and other authoritarian states. See Woesler (2000), p. 325 ff. with further citations. For details on restrictive Internet regulation in China, see Quiu (2000), p. 10 ff.

¹⁵⁶See point 3.1.3. above.

¹⁵⁷For a fundamental account of on exclusion from social groups and its consequences, see Ditrich and Sassenberg (2016), p. 27 ff. with further citations.

¹⁵⁸For a detailed account, see Morozov (2011), p. 82 f.

¹⁵⁹Dahl (1989), p. 339.

¹⁶⁰Norris (2001), p. 96 f. with further citations.

¹⁶¹Shulman (2009), p. 23 ff. with further citations.

¹⁶²The term was coined by Karpf (2010), p. 7.

online? Or is the digital world only suited to superficial, opinionated and aggressive communications? Ultimately, it is a question of the quality of online political discussions.¹⁶³ A fundamental characteristic of social media communication is brought to bear here: it is basically very short and to the point. Paradigmatic are Tweets, with their maximum of 280 characters. This is not a good basis for differentiated and informed opinions and discussions.¹⁶⁴

A look at the reality of the Internet shows that the new possibilities of participation are increasingly being recognised and used. One part of the Internet—the political part—is now characterised by an unmistakable diversity of political initiatives, activities and activists.¹⁶⁵ The (political) information possibilities have also multiplied across the network.¹⁶⁶ The political parties discovered the possibilities of the Internet in the 1990s. Communication within parties¹⁶⁷ and their communication with citizens is beginning to change noticeably. Particularly in the USA,¹⁶⁸ but also in Europe,¹⁶⁹ the Internet has now become an instrument of the election campaign, which is also conducted online.¹⁷⁰ Political parties are already developing concepts for *political customer relationship management (CRM)* on the basis of collecting donations via the Internet,¹⁷¹ which has achieved some spectacular successes in the USA.¹⁷² *Micro-targeting*, which primarily targets undecided voters, has become a particularly effective tool.¹⁷³ The American presidential election campaign of 2016 shows that not only is the classic election campaign going digital, but the use of the Internet and social media is disruptively and fundamentally changing the election campaign.¹⁷⁴ The Brexit referendum in Great Britain in 2016 suggests a similar conclusion.¹⁷⁵ New forms of election campaigns are also changing the content.¹⁷⁶ The state is also beginning to realise the participatory potential of the Internet and is

¹⁶³Russmann (2015), p. 192 f. with further citations is rather sceptical about the quality.

¹⁶⁴Tucker and others (2017), p. 53.

¹⁶⁵Kersting (2016), p. 95 ff. provides a current empirical overview.

¹⁶⁶Local authorities in particular set up information and interaction systems at an early stage. For a detailed account with case studies, see Donath (2001), p. 135 ff. with further citations.

¹⁶⁷For an early account of the change in intra-party communication due to the Internet, see Nixon and Johansson (1999), p. 141 f.

¹⁶⁸On the development of the online election campaign in the USA, see Persily (2017), p. 66 ff. and Kamarck (2002), p. 81 ff. with further citations.

¹⁶⁹See Ohme (2019), p. 1 with further citations.

¹⁷⁰For general information on the possibilities of online campaigns, see Beckedahl (2005), p. 103 ff. with practical examples.

¹⁷¹Kamarck (2002), p. 94.

¹⁷²In addition, Siedschlag et al. (2002), p. 54 ff. In the context of electronic government, we also speak of *Citizen Relationship Management*. On this term and its history, see Larsen and Milakovich (2005), p. 58 f.

¹⁷³Persily (2017), p. 65 f.; Kruikemer et al. (2016), p. 368 ff.

¹⁷⁴Persily (2017), p. 71 and passim.

¹⁷⁵Bodó et al. (2017).

¹⁷⁶Ohme (2019), p. 4 f. with further citations.

involving citizens more strongly in decision-making processes online. Municipalities in particular have become pioneers of electronic communication and participation worldwide.¹⁷⁷ However, there is no mistaking that although online participation is taking place, it is doing so at a rather modest level.¹⁷⁸

4.3.4 Online Elections: Psychology and Symbolism

A more far-reaching, logical step would be where not only election campaigns, but also the elections themselves are conducted online. After all, elections are the most important democratic means of participation.¹⁷⁹ Estonia has assumed a pioneering role. Since 2005, elections there have been conducted online via the Internet.¹⁸⁰ However, experiments in online elections are also being conducted outside Estonia. Experience is being gathered and evaluated in a wealth of pilot projects. It is still uncertain whether this will lead to possibilities for Internet voting in political elections in the future. In Germany, online elections are not ruled out as a fundamental principle¹⁸¹; although the constitutional hurdles are high,¹⁸² they are certainly not insurmountable.

Yet, there are two basic arguments against Internet elections that have been ignored so far.

One problem is the speed with which decisions can be made and articulated in online elections.¹⁸³ In contrast to traditional face-to-face voting, the time between the decision to vote and the act of voting is considerably shortened in some forms of online voting. This may encourage spontaneous, possibly unreflected voting decisions.¹⁸⁴ Junk voting on the hoof via a smartphone over the Internet—this is not a vision that does justice to the importance of the electoral act. This danger could, however, be averted by appropriate software that contains moratoria and other time-delaying moments in order to give voters better opportunities for more deliberate voting.¹⁸⁵

¹⁷⁷See von Korff (1998), p. 95 ff. with further citations. An instructive example is the analysis of the websites of Californian local authorities in Hale et al. (1999), p. 96 ff. with further citations.

¹⁷⁸See Kersting (2016), p. 109 f. on the basis of an empirical study.

¹⁷⁹For a positive account about the democratic effects of online elections, see Siedschlag et al. (2002), p. 38. Neymanns (2002), p. 33, is much more sceptical. For a fundamental account of the importance of elections, see Nohlen (2004), p. 25 ff. with further citations.

¹⁸⁰For further details, see Merkert (2015). Springall et al. (2014) provide a critical analysis of weak points in the 2014 elections.

¹⁸¹BVerfG, Judgment of the Second Senate of 3 March 2009-2 BvC 3/07-marginal no. 117, http://www.bverfg.de/e/cs20090303_2bvc000307.html (28/8/2018).

¹⁸²For details, see Will (2002), p. 71 ff. with further citations; Hanßmann (2004), p. 184 and passim.

¹⁸³Buchstein (2000), p. 891.

¹⁸⁴On so-called “junk voting”, see Buchstein (2000), p. 891.

¹⁸⁵Buchstein (2000), p. 891. Footnote 10 reports on corresponding software developments.

Another objection weighs more heavily. An election is not just about filling a public office. Equally important is the *symbolic function* of the election, which contributes to the integration of citizens in democracy.¹⁸⁶ Elections are important stabilising rituals of modern democracies.¹⁸⁷ The public polling station is a manifestation of voters' support for democracy and their will to shape public affairs together.¹⁸⁸ At the same time, an indispensable basic element of democracy becomes publicly visible at the polling station: every citizen has one vote, regardless of other factors such as origin, income or education. It is doubtful whether the symbolic function of elections can be fulfilled if votes are cast privately on the PC "when I get a moment" or by mobile phone "during the advertising break of the latest detective thriller".

4.3.5 Monitory Democracy: *The Network's Transparency Promise*

It is said that there are no more political secrets on the Internet.¹⁸⁹ Even if one does not share this assessment in its full radicality: more transparency and a democratic public sphere can—at least potentially¹⁹⁰—be created and maintained by the Internet.¹⁹¹ The network provides additional forms and capacities for public discussion.¹⁹² In addition to the offline public sphere, an online public sphere is gaining in importance especially in younger democracies still with authoritarian communication structures.¹⁹³ The basis for this is the communicative structure of the Internet: networked, egalitarian and essentially available to an unlimited number of

¹⁸⁶On the symbolic function of elections, see Katz (1997), p. 105. The German Federal Constitutional Court also repeatedly stresses the integration function of political elections: BVerfGE 6, 84, 92 f.; 51, 222, 236; 71, 81, 97; 95, 408, 418 f.

¹⁸⁷Soeffner (1998), p. 222 f. with further citations.

¹⁸⁸Neymanns (2002), p. 25.

¹⁸⁹Castells (2005), p. 170.

¹⁹⁰On the attempts of authoritarian states to suppress this potential in practice, see Woesler (2000), p. 321 ff. with further citations, Quiu (2000), p. 10 ff. and Fang (2004), p. 135 ff. on the example of the People's Republic of China.

¹⁹¹Zittel (2000), p. 911. Donges and Jarren (1999), p. 85 ff. with further citations, provide an overview of the rather enthusiastic assessments of the public potential that the Internet can engender. Woesler (2000), p. 315, stresses that the Internet, since 1996 for example in China, has not only become a promoter of a critical public sphere, but its actual creator.

¹⁹²Siedschlag et al. (2002), p. 85 with further citations.

¹⁹³For details using the example of Korea, see Lee (2005), p. 808 ff. with further citations. For a more reserved approach, see Schmidt (2012), p. 5 f. with further citations.

participants.¹⁹⁴ Given the importance that the public sphere has for democracy,¹⁹⁵ this represents a large potential of digital and networked technology to promote democracy. Digital transparency has—this is the view of the *cyberoptimists*—positive effects on the politicians’ responsiveness towards the voters.¹⁹⁶ The more citizens know about their policies, the greater the opportunities for influencing politicians. Voter pressure on politicians is on the rise¹⁹⁷; responsiveness is increasing—at least ideally. This in turn could strengthen confidence in politics and reduce disenchantment with politics. However, it is uncertain whether that will really happen. Increased transparency may also undermine confidence in parliamentarians and the political process.¹⁹⁸ The result would be a loss of importance of the institutions of representative democracy.

For about two decades, the idea of transparency has indeed been spreading globally.¹⁹⁹ More transparency—together with increasing digitalisation and networking—ensures more data and information. This is the hour of big data technologies. *Big data* is the collective term for a new type of data analysis using algorithms based on enormous storage and evaluation capacities.²⁰⁰ It is intended to recognise patterns and correlations in the digital or digitised data sets and thus enable completely new insights into social, economic or political processes and problems.²⁰¹ The stored information allows more and more accurate forecasts for the future to be made. Political, economic and epidemiological trends can be derived from the information collected.²⁰²

What are termed *parliamentary monitoring organisations* (PMOs) have been founded around the world to monitor politics and parliaments with the help of big data technologies and to analyse the activities of politicians.²⁰³ One example of this is Germany’s *abgeordnetenwatch* organisation.²⁰⁴ The new technologies enable political processes to be permanently observed and analysed. Algorithms are used to glean new—and often surprising—insights from the vast amount of data. This bears the hallmarks of an incipient *monitory democracy*.²⁰⁵

¹⁹⁴Siedschlag et al. (2002), p. 85; Lee (2005), p. 822.

¹⁹⁵For a basic approach to the meaning and significance of the public, see Peters (2007), p. 55 ff. with further citations.

¹⁹⁶Buzogány, ZVglPolitWiss (2016), p. 72 f. with further citations.

¹⁹⁷One way of exerting pressure on elected members is through media-effective rankings of elected members. For an instructive account, see Buzogány (2016), p. 75 f., 84.

¹⁹⁸Buzogány (2016), p. 73 with further citations.

¹⁹⁹Buzogány (2016), p. 71 f. with further citations.

²⁰⁰Mainzer (2016), p. 157 ff. with further citations. 1.

²⁰¹Mainzer (2014), p. 237 ff. with further citations, outlines visions and different potential applications. On the fundamental importance of algorithms, see Hofstetter (2014), p. 103 ff.

²⁰²For details, see Mayer-Schönberger and Cukier (2013), p. 52 ff.

²⁰³For details, see Mandelbaum (2011), p. 17 ff.

²⁰⁴www.abgeordnetenwatch.de (28/8/2019). For a detailed, empirical account, see Buzogány (2016), p. 74 ff.

²⁰⁵The term was coined by Keane (2011), p. 212 ff.

4.4 Democratic Algorithms?

Algorithms control the digitalised world. They are therefore also the instrument for realising democracy in the digitalised world. Thus, if you want democracy, you need democratic algorithms.

4.4.1 Governance by Algorithms: *The Importance of Algorithms in the Digitalised World*

Algorithms are not necessarily software. Originally, algorithms were nothing more than a structured method for solving problems.²⁰⁶ They are sophisticated, strictly structured rules that can be used to obtain results from data and information.

They remain effective problem-solvers. However, their importance now goes far beyond that. This is because they have been transformed into software, connected to databases and combined with ever-increasing computing power. Algorithms are indispensable and omnipresent. They are the material from which the digitalised world is created. The importance of algorithms is huge—and will continue to grow.²⁰⁷ They are extremely helpful, and often even ingenious. They expand the possibilities in all areas of human life.²⁰⁸ They also increasingly control governmental processes—for example in the area of social authorities or public safety.²⁰⁹

Algorithms influence how people think, and they control people's behaviour.²⁰⁹ This is particularly evident in the case of algorithms that search, select, aggregate and distribute information. Such search algorithms are of course a tool for finding information. At the same time, they determine what people think about, how they think and the information basis on which they do so.²¹⁰ They thereby shape people's world view and construct social reality.

In their early days, algorithms were an important way of helping people make decisions. That has now changed: algorithms often *replace* human decisions.²¹¹ When it comes to banal everyday decisions, this is a welcome relief. Algorithms can also improve the quality of the decision in complex decision-making situations. This realisation is the reason why, in aviation and beyond, security systems are widely controlled by algorithms, and no longer by humans.

²⁰⁶Gillespie (2014), p. 167. For details on the algorithm as a concept, or even myth, see Ziewitz (2016), p. 10 f.

²⁰⁷Just and Latzer (2017), p. 242 with further citations.

²⁰⁸Ziewitz (2016), p. 5 f. with further citations.

²⁰⁹Just and Latzer (2017), p. 242.

²¹⁰Just and Latzer (2017), p. 245.

²¹¹Pasquale (2015), p. 8 with further citations.

However, there are of course exceptions. The quality of some decisions depends on human intuition, spontaneous flexibility or the sophisticated interplay of emotion and reason in individual cases. Algorithms cannot (yet) achieve this.

In a way, algorithms are deeply inhuman. They are completely emotionless; spontaneity and chance mean little to them. They cannot map human thinking and behaviour that overcomes patterns and breaks down boundaries.²¹²

The triumph of algorithms can also limit people's sovereignty and autonomy. This is particularly serious when algorithms make decisions about people. The infamous *Facebook experiment* shows how subtle and far-reaching the influence can be. In 2012, the Facebook news feed sent manipulated messages to its users in which emotional content was altered. The manipulation allowed the emotional mood of the users to be controlled. If positive news was reduced, sentiment worsened and more negative postings were observed. Conversely, if there was more positive news, the mood improved and the postings became more positive.²¹³

In a nutshell: algorithms have long since ceased to be just an instrument with which people solve problems. Nowadays, they themselves have become actors that shape the world.²¹⁴

4.4.2 Governance of Algorithms: *The Democratic Problem of Algorithms*

Algorithms and law have a comparable function, at least partially²¹⁵: they control human behaviour. And both influence thinking. Algorithms are thus just as relevant to democracy as law. This democratic problem resulting from digitalisation can hardly be overstated. What does it consist of?

In democracy, law is only effective if and because it is democratically legitimised and observes a minimum standard of human rights. The same should apply to algorithms. At first glance this seems to be unproblematic. Like all actions, algorithms need to comply with legal requirements. A banal example: the algorithms that process personal customer data for Amazon, for example, must satisfy the requirements of data protection law. If they breach standards, there will be consequences. This is the way law works in all areas of human society. Nevertheless, this perspective does not go far enough.

Algorithms are no longer mere objects of legal norms. They are actors and in this role have developed into genuine competitors to the law. Their effect on the content of human behaviour is often counter to the effect of the law. They can contain and implement social values and political decisions that are contrary to the law. They can

²¹²Entman and Usher (2018), p. 301.

²¹³Kramer and others (2014), p. 8788 ff.

²¹⁴Just and Latzer (2017), p. 246 with further citations. For impressive examples, see Slavin (2011).

²¹⁵See Nissenbaum (2011), p. 1373.

contain a certain degree of prejudice,²¹⁶ make and implement unfair decisions or discriminate.²¹⁷ At this point, the tension between algorithms and the law comes to a head.

The algorithm itself makes decisions that can be politically and socially relevant. Even the rules that it applies can be politically relevant. An example: Google's search algorithm arranges websites according to their relevance.²¹⁸ What does it consider relevant and for what reasons? This question remains unanswered and is considered a trade secret. The position with Facebook's news feed is similar. The algorithm underlying the news is completely opaque and mixes political and social news with commercial advertising.²¹⁹ That is a highly charged issue. Empirical research has shown how even small changes in Facebook's news feed can cause far-reaching behavioural changes among countless users.²²⁰ Momentous decisions are made even earlier, before algorithms even begin to work. Algorithms process data according to certain rules and derive their results from them. To do so, they are usually supplied with data by databases.²²¹ The very selection and processing of the data influences the results an algorithm will arrive at. Which data is considered at all and how it is categorised can be a deeply political decision with social consequences.²²²

Under constitutional law, the distribution of roles in the democratic constitutional state is clear. Essential decisions must be made by the legislator.²²³ What does that mean? Private algorithms often have just as far-reaching consequences for people as legal rules passed by democratically legitimised parliaments. This stands counter to the principle of democracy.

Democratically containing private power is not a new task for law and politics. The law tries to discipline and limit power in a variety of forms. Examples include antitrust law, consumer protection law, labour law, broadcasting and press law and criminal law. The list could be continued indefinitely. This is an important task of politics at international, European and national level: it needs to create legal instruments that balance the power of algorithms and the democratic public interest.

As a rule, we do not know who is programming algorithms based on which criteria. Equally, the data basis on which most algorithms work is not at all transparent. Nevertheless, they have a significant impact on everyday life and people's lives. And that violates the principle of democracy.

²¹⁶For details, see Bozdag (2013), p. 209 ff. with further citations and Introna and Nissenbaum (2000), p. 169 ff.

²¹⁷Ziewitz (2016), p. 5 with further citations.

²¹⁸For a critique, see Gillespie (2014), p. 178.

²¹⁹Gillespie (2014), p. 177 with further citations.

²²⁰Zittrain (2014), p. 335 ff.

²²¹On the importance of databases for algorithms, see Gitelman (2013), p. 2f.

²²²Gillespie (2014), p. 171 with further citations.

²²³BVerfGE 40, 237, 249; 83, 130, 152, case law.

4.5 Conclusion: Digital Technology as an Opportunity and Risk for (Representative) Democracy

Digital technology and the Internet have considerable potential for the further development of democracy. Foregrounded are above all the significantly expanded opportunities for citizens to participate and the vision of a democratic public sphere that ignores all borders. In practice, however, this potential remains largely untapped to date. Apart from that, the Internet is not necessarily democracy-promoting *per se*. The further development of digital technology is certainly capable of triggering developments that can—and will—cause democratic problems. This is a challenge for network policy—and for democratic politics.

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Chapter 5

Overloaded. Classical Democracy



Digitalisation is making the world more complex. This is a challenge for democracy. Classical parliamentary democracy is reaching its limits. It is increasingly proving to be overloaded.

5.1 Digital Complexity. The Challenge to Democracy

Digitalisation is a development that is significantly increasing the complexity of the world. What does it mean? And what does that mean for democracy?

The concept of complexity is used differently in different academic disciplines. Here we are concerned with the technical concept of complexity in the social sciences.¹ In this context, we speak of complexity where there are multiple non-transparent or unknown and strongly networked factors whose interactions and inherent dynamics are largely unknown and unpredictable.² Examples of complex systems include climate research.³ The human immune system, the central nervous system, ecosystems or economic systems are also typical complex systems.

Digitalisation renders physical boundaries more permeable. It creates new communication possibilities. It makes access to public (political) communication extremely easy. It significantly increases the number of political actors. Digitalisation makes new and unexpected interactions between citizens and other political actors possible—networking increases. Different—formal and informal—communication relationships exist between different participants, and it is within and

¹Weyer (2009), p. 7 ff. with further citations.

²On the complexity of non-linearity, see Perrow (1987), p. 95 f. using the example of large-scale technical plants. On the limits of the controllability of technology, see Grote (2009), p. 158 with further citations.

³Weyer (2009), p. 9.

from these that decisions grow. That makes for an unclear overall picture. Spheres of influence and responsibilities become unclear and blurred. Causal chains are hard to identify. Democratic legitimacy contexts become diffuse, gaps in legitimacy appear.

In short: digitalisation is making the world and politics significantly more complex. This has consequences for the governance of politics⁴ and for democracy as a whole.

Complexity cannot be fully controlled.⁵ The more complex a system is, the less it can be controlled down to the last detail. The rational controllability of complex systems is a myth.⁶ Nevertheless, there is the need, perhaps even an imperative, to control and steer such systems. They are often too important and too dangerous to be left to their own devices.⁷ Two striking examples are air transport and⁸ the international financial markets.⁹ Another example is (democratic) politics. How can politics be rationally controlled when the digitalised world is becoming increasingly complex?

The significant increase in the complexity of reality has resulted in the conventional, relatively simply structured mechanisms and concepts of democracy becoming overloaded. Traditional models of democracy are not sufficiently complex for the digitalised world. If appearances are not misleading, then more complex legitimisation mechanisms and incipient democratic forms are already developing. A differentiated conception of democracy is emerging that corresponds to this unbounded and networked reality.¹⁰ The new *democracy of non-transparency* will consist of different elements that complement and influence each other, and together can guarantee democratic legitimacy and control.

5.2 Complexity Through Digital Networking

One characteristic of digitalisation is networking. The growth in levels of digital networking is significantly increasing the complexity of the world, and this is having a significant impact on all areas of the modern world.

⁴For a basic account of political action in a complex world, see Mitchell (2008), p. 109 ff.

⁵Weyer (2009), p. 20.

⁶Grote (2009), p. 150.

⁷See Schimank (2009), p. 58.

⁸Schimank (2009), p. 69 with further citations. For detailed information on air traffic, see Grote (2009), p. 152 ff.

⁹Svetlova (2009), p. 185 ff.

¹⁰For initial approaches, see Scharpf (1999), p. 20 ff; Tietje (2003), p. 1095; Bogdandy (2003), p. 866; Müller (2003), p. 71 ff.

5.2.1 *Networks: Patterns of Life*

Networks are a pattern of life.¹¹ They can be found in nature, in technology and in society. What is a network in this context?

A network is a complex organisational pattern in which different, autonomous components and units enter into various new connections with each other.¹² The linkages between heterogeneous possibilities significantly enhance the number of options¹³: networking considerably increases the number of possibilities. Networks are decentralised¹⁴: there is no central coordinating authority that controls—or could control—all links.

Networking is a 15 billion-year-old *legacy of nature*.¹⁵ Ultimately, nature as a whole consists of countless networked systems. From the beginning of the Earth's history, networking has been a key mechanism for evolution.¹⁶ Ecological networks are particularly familiar and have been well researched.¹⁷ The human body and mind are an outstanding example of the networking of individual components into a functioning whole.¹⁸ The human brain is currently understood by the natural sciences as a neural network.¹⁹ The large number of networks found in nature suggests that networks are indeed the patterns of life.²⁰

A tendency towards networking can also be seen in the *technical infrastructures* of modern societies.²¹ The complex infrastructure tasks in modern society are fulfilled by systems that have the character of a network. Examples include the transport network,²² telecommunications networks,²³ energy²⁴ and water supply

¹¹Capra (1996), p. 100.

¹²Similarly, Buchanan (2002), p. 234; Castells (2001), p. 528 f.; Capra (1996), p. 101; Kelly (1997), p. 38.

¹³Similarly, Tackle (2001), p. 47.

¹⁴On decentralisation through networking and its consequences, see Lübke (2004), p. 141 ff. with further citations.

¹⁵Bloom (1999), p. 217, is emphatic here.

¹⁶Bloom (1999), p. 37.

¹⁷See Dorogovtsev and Mendes (2003), p. 60 ff. with further citations.

¹⁸Andritzky and Hauer (2002), p. 13. To illustrate it with a concrete example: in conjunction with the brain, glands and the immune system, neuropeptides and their receptors form a communicative network. For details, see Pert et al. (1985), p. 820 ff.

¹⁹Capra (1996), p. 101. On neural networks, see Dorogovtsev and Mendes (2003), p. 54 ff. with further citations.

²⁰To the point and somewhat emotional is the formulation by Capra (1996), p. 100.

²¹Mayntz (1992), p. 21 with further citations.

²²On the history of the transport network, see Beyrer (2002), p. 75 ff.

²³On the history and characteristics of telecommunications networks, see Hörisch (2002), p. 233 ff.

²⁴For detailed information on energy supply networks, see Friedrich (2002), p. 177 f. and Dorogovtsev and Mendes (2003), p. 69 f.

networks.²⁵ Above all, computer science and computer technology are by their nature based on the network concept and are constantly developing it further. The Internet, for example, is rightly referred to as the network of networks.²⁶ The World Wide Web is also a global network: a network of electronic documents (web pages) that are multifariously connected via hyperlinks.²⁷ Modern, highly complex software is a network of countless software components that are interconnected and interact.²⁸

Networks are at the core of our *civilisation*—this realisation is gaining influence.²⁹ Even human language can be understood as a network.³⁰ Words are the nodes of this network, which grows through “interactions” between words and concepts. This is a groundbreaking linguistic insight—and goes even further. Because language has a great significance for human thought—and thus also for action—its network character may even be a cause of the networked character of human societies.

Especially in the *economy*, networks are not a new phenomenon. Economic and trade structures have always been characterised by a more or less pronounced network structure.³¹ In business administration, the focus is on moving away from the value creation *chain* towards value creation *networks*. Value is no longer created exclusively in long production chains, but in networks in which many participants actively create and also demand value. This new approach has practical implications for corporate structures. Corporations are increasingly organising themselves as networks.³² Companies form value creation networks³³ with other companies—strategic, cooperative or operative. Several management theorists are already seeing the emergence of a *network economy*.³⁴ As always, this entails both opportunities and risks.³⁵

²⁵For detailed information on water supply networks, see Schliephake and Niemann (2002), p. 193 ff.

²⁶On the Internet, see Dorogovtsev and Mendes (2003), p. 34 f. The report on the history of the origin of the Internet in Hafner and Lyon (2000), p. 55 ff., which looks at the original network of the Internet, is instructive on this topic.

²⁷For details about the WWW as network, see Dorogovtsev and Mendes (2003), p. 35 ff.

²⁸Dorogovtsev and Mendes (2003), p. 71.

²⁹Dorogovtsev and Mendes (2003), p. 219.

³⁰Emphatic here are Dorogovtsev and Mendes (2003), p. 63.

³¹Steffen (2002), p. 185 ff., illustrates the global network of trade in goods with a concrete example.

³²For detailed information on the network structure of companies or within groups, see Picot et al. (2003), p. 316 ff. with further citations.

³³Picot et al. (2003), p. 316 ff. with further citations, and examples.

³⁴See especially Shapiro and Varian (1999), p. 173 ff. This could lead to the network concept also playing a greater role in law in the future. Brownsword (2006), p. 133 ff. with further citations, and Boehme-Neßler (2008), p. 502 ff. with further citations and *passim*.

³⁵Teubner (2004), p. 51 ff. outlines the opportunities and risks associated with the networking of companies.

However, networks are not limited to the economy.³⁶ Further examples of social networks can be found in *politics*. An increasing number of empirical studies show that there is a plethora of different policy networks.³⁷ Policy networks are increasingly recognised as an important element of complex social structures.³⁸ The network paradigm thus makes an important contribution to a better understanding of modern, fragmented, multifaceted policy systems. How does cooperation occur and how is power exercised in politics,³⁹ how and why is information exchanged,⁴⁰ and how does politics organise itself in modern societies? How are political decisions taken in multi-level systems—such as federal states or the European Union?⁴¹ These are fundamental questions that can be better understood with the help of the network paradigm.

Finally, the organisational sciences are also coming to realise that complex *organisations* must first and foremost be understood as networks.⁴² The term “network society” is currently one of the key terms used to describe and understand social organisations and modern societies.⁴³ Initial attempts are also being made to understand the law (or legal system) as a network.⁴⁴

5.2.2 Complexity Through Digital Networking

Digitalisation is—not the only⁴⁵—driver of increasing networking. Mutually reinforcing technological and cultural causes are at play. Digital technology has

³⁶On the importance of computer networks as social networks, see Wellman (2001), p. 2031 f.

³⁷The detailed case studies in Marin and Mayntz (1991), p. 97 ff., are very instructive.

³⁸Benz (1995), p. 185 ff. with further citations.

³⁹See Wilkesmann (1995), p. 52 ff. with further citations; Stokman (1995), p. 160 ff. with further citations, and Kappelhoff (1995), p. 24 ff. with further citations.

⁴⁰See Pappi and König (1995), p. 111 ff.

⁴¹Networks may have emerged in response to the challenge of having to make decisions in multi-level systems. On this thesis, see Benz (1995), p. 186 ff. with further citations. On the particularities of European policy networks, see Heir (1995), p. 205 ff. with further citations.

⁴²For a fundamental account, see Mayntz (1992), p. 19 ff. with further citations; Mayntz (1993), p. 39 ff. with further citations; Tackle (2001), p. 40 ff., who diagnoses that there is still a “theoretical deficit of network research in the social sciences”.

⁴³For a pioneering and extensive account, see Castells (2001). For a sceptical view, however, see Stehr (2000), p. 84 f. Keupp (2002), p. 145 ff. with further citations. On the development of network research in political science, Kenis and Schneider (1991), p. 27 ff. with further citations, gives an instructive overview of the discussion and the “triumphant march” of the network paradigm in the social sciences.

⁴⁴Boehme-Neßler (2008), p. 535 ff.

⁴⁵Another driver of ongoing networking is globalisation. This is particularly evident in the area of telecommunications technology and telecommunications policy. For details, see Fuchs (1999), p. 184 ff. with further citations.

led to an explosion in the power of information and communication technologies.⁴⁶ Information is converted into digital units—bits—and processed by processors. It is transported on networks without the costs being dependent on the distance of the information path covered.⁴⁷ This makes it not only technically possible, but also economically sensible, to establish a wide variety of connections via which information can be exchanged.

In addition to this technological aspect that encourages networking, there is also a cultural imperative. Networks are more valuable and important the bigger and more branching they are.⁴⁸ In other words: the added value of a network increases exponentially with its density and diversity. This shapes the inner logic of the constantly expanding branching that is characteristic of networks. From a cultural point of view, a network must be as dense and extensive as possible. Digital technology offers the technical opportunity to follow through on this cultural postulate. The result is clear: networks emerge within a dynamic process when they have reached a “critical mass” of participants.⁴⁹ The technological *opportunity* of networking meets the inner, cultural *necessity* of ever further networking—that is the blend that drives networking forward. The *result* is the emergence of increasing numbers of denser networks. Cultural, economic and social systems are becoming increasingly interlinked. In the culture of linking that has emerged on the World Wide Web, the quality of a website is measured not least in terms of how many links refer to it. Websites are under pressure—cultural and/or economic—to “link” as multifariously as possible within the network.⁵⁰ This is a strong driver of ever-increasing networking.

Networks are structured in a non-linear fashion. This leads to multi-optionality and increases the complexity of networks. Linear structures create clear connections with a fixed, manageable number of connections between the individual elements. This is completely different with network-like structures. Between the nodes of a network is a multitude of non-transparent connections undergoing constant dynamic change.⁵¹ There is not merely one—linear and clear—possibility for moving from one node to another. On the contrary: in networks, there are many different connections between the individual elements. This multi-optional structure of a network dramatically increases its complexity.

⁴⁶Zerdict et al. (2001), p. 149 f. with further citations.

⁴⁷Zerdict et al. (2001), p. 150.

⁴⁸This is Metcalfe’s law. See Meckel (2001), p. 73 with further citations. This is particularly evident in neural networks or economic value creation networks. On the economic view, see Shapiro and Varian (1999), p. 174; Thorelli (1986), p. 37 ff; Miles and Snow (1992), p. 53 ff.

⁴⁹In addition, this cultural-technological mechanism is reinforced by further improvements in technical performance. Zerdict et al. (2001), p. 150.

⁵⁰Linking fosters the spread of viral forms of communication, and this can be empirically observed on the Internet. See earlier Baudrillard (1991), p. 81 ff.

⁵¹For details, see point 5.2.1 above.

5.3 Complexity Through Digital Acceleration

Digitalising processes accelerates them. Digitalisation is significantly accelerating the world. The outcome: greater complexity of the digitalised world.

5.3.1 *Acceleration Through Technological Change*

That technological change generally leads to acceleration is not an original insight. Acceleration is not a new phenomenon in history. An acceleration of life can be identified from the late Middle Ages onwards. The modern era in particular is characterised by permanent acceleration in all areas.⁵² Since industrialisation in the nineteenth century, the pace of historical acceleration has undergone a considerable qualitative increase.⁵³ In a word: modernity *is* speed.⁵⁴

Digitalisation is once again giving society a tremendous boost of speed.⁵⁵ Digital technology creates enormous opportunities for automation: the storage, processing and transmission and often even the procurement of digitalised information can be automated.⁵⁶ At the same time, digitalisation also means computer-compatibility. Digitalised information and products can be processed by computers in an instant. The computer's almost unlimited "computing power" acts as an accelerator.⁵⁷ Added to this are the constantly increasing capacities and speeds of information and communication technology, which further accelerate the transport of digitalised information.⁵⁸ This frees up resources in terms of human attention, energy and time⁵⁹ that can be used for other activities. Thus, more can occur simultaneously over the same period of time: this is the potential for acceleration.⁶⁰

5.3.2 *Vicious Circle of Acceleration*

The *potential* for acceleration of technical progress becomes real acceleration that is constantly increasing. What are the reasons for this?

⁵²See Koselleck (2000), p. 157 ff.

⁵³Virilio (1993), p. 7 f.

⁵⁴Eriksen (2001), p. 159.

⁵⁵For details, see Eriksen (2001), p. 97 ff.

⁵⁶Klodt (2003), p. 98 with further citations.

⁵⁷On the computer as a "speed machine", see Borscheid (2004), p. 362 ff. with further citations.

⁵⁸For details on the acceleration of the transmission of information, see Rosa (2005), p. 126 f. with further citations.

⁵⁹Franck (1991), p. 76.

⁶⁰Rosa (2005), p. 115.

Fears and constraints are important factors that guide human behaviour. They also play a role in the acceleration of life.

Technological developments create more opportunities. Instead of relieving the burden on the individual, however, the increased options for action and life choices result in the fear of missing out on valuable things.⁶¹ As a result, the pace of life is increased. People *want* to live longer. The pressure to adapt to the environment has a similar effect, and it, too, is accelerating.⁶² As objective events accelerate, the individual must adapt.⁶³ People *need to* live faster—whether they like it or not. This in turn accelerates social change and technological progress. Humans and society find themselves in a *vicious circle of acceleration*.

The dynamic potential of digitalisation is particularly high. The deeper reason for this lies in the crossings of boundaries rendered possible by digital technology. Boundaries that need to be overcome or are even insurmountable fundamentally limit possibilities and reduce complexity. They act as decelerators.⁶⁴ For example, the acceleration of life in the seventeenth century through improved road construction and stagecoaches came up against a natural, biological limit: the power of the horses remained limited.⁶⁵ Digitalisation, on the other hand, permits and facilitates the crossing of borders. A whole series of previously effective boundaries have become obsolete through digitalisation processes. Their function as decelerators and simplifiers lapses. An example: the speed of conventional mail is restricted by physical limits. These limits no longer apply to emails. The result is that the volume of emails (that need to be) processed is significantly higher than the equivalent number of letters in the past. There is less time for individual communication.

5.4 Snail's Pace. Democracy as a Slow Form of Government

Democracy *per se* is a slow form of government. A glance at the democratic decision-making process shows why democracy is necessarily slow.

Democratic decision-making requires above all freedom of will and reflection.⁶⁶ Both of these take time.

⁶¹On the “fear of missing out”, see Rosa (2005), p. 218.

⁶²For details, see Rosa (2005), p. 256 f. with further citations.

⁶³Rosa (2005), p. 219.

⁶⁴See Rosa (2005), p. 139 ff.

⁶⁵Koselleck (2000), p. 160.

⁶⁶Habermas (1962), pp. 159 f., 216.

5.4.1 *Free Will. Development of Democratic Awareness*

Democracy only works if the population has a stable and long-term democratic consciousness. Democracy cannot survive through ideas and institutions, law and statutes alone. It needs to be propped up by the inner motivation of the citizens—in their democratic consciousness.⁶⁷ In short: democracy needs democratic personalities.⁶⁸

How does democratic consciousness develop? Are we born with it, or do we learn it? This question has barely been empirically researched. There are, however, key studies on the comparable question of the emergence of moral feelings.⁶⁹ They show that moral feeling is innate *and* acquired. It builds on biological foundations through socialisation, education and culture.⁷⁰ Biology and culture interact. These are long processes. Moral sensibilities therefore only develop over long periods of time—both in the individual and within a society. This can be applied by analogy to the emergence of democratic consciousness. Both of these—moral sensibility and democratic consciousness—are comparable. Both are to do with a culturally influenced, further developed feeling that has arisen at the same stage of human phylogenetic development.

Therefore, there are some arguments in favour of the hypothesis that democratic consciousness is innate *and* acquired. It arises and changes in lengthy and time-consuming processes.⁷¹ Also, it has to be strengthened and rebuilt again and again.⁷² That takes time and makes democracy a slow form of government.

5.4.2 *Reflection. Integration of the Many*

Participation is a—if not the—central element of the democratic ideal. A decision is considered democratic if and because many citizens have participated in the decision-making process. Participation costs time. This is particularly true when participation opportunities are very complex and diverse. The second factor is

⁶⁷Busch (2007), p. 42. For a detailed description of the term, see Lange (2005), p. 260 ff. with further citations.

⁶⁸For details of the democratic personality following on from Freud's concept of cultural citizenship, see Busch (2007), p. 47 ff. Adorno (1973), pp. 37 ff., 322 ff. describes the opposing type as an authoritarian and anti-democratic character.

⁶⁹For a pioneering approach to the emergence of moral feelings and judgements in the child, see Piaget (1973), p. 25 f. and passim Kohlberg (1996), p. 123 f., develops a step-by-step model of human moral development from a psychological perspective.

⁷⁰See Weyers (2003), p. 136 with further citations., and Greiffenhagen (1999), p. 93.

⁷¹Similarly, Lange and Himmelmann (2007), p. 17 and Busch (2007), p. 47 ff. with further citations. For details on the process by which democratic consciousness is formed, see Lange (2005), p. 262 ff. with further citations.

⁷²Lange and Himmelmann (2007), p. 18 stress that consciousness is not static.

representation. A range of different interests must be represented and articulated within the democratic process. This requires lengthy communication processes between parties and associations and their members. This is very time-consuming. The democratic process also has a qualitative aspect. In theory at least, the participation of many actors and interests should increase the quality and rationality of the decision. Decisions that take longer may have been better thought through.

5.5 *Tempocracy. Democracy and Digital Tempo*

The acceleration emanating from digitalisation is putting democracy under considerable pressure. Society is becoming increasingly complex. Social interactions are becoming ever faster. The problem-solving pressure on democracy is increasing. The pressure of expectations is just as high: the digital society is impatient and expects quick solutions to problems. Social expectations are inevitably disappointed. Although democracy does arrive at solutions, it does so very slowly.

5.5.1 *Clash of Cultures. Democracy and Law vs. Acceleration*

The meeting of democracy and digital acceleration can be characterised as a *clash of cultures*.⁷³ Digital culture is dominated by acceleration, speed and volatility. Digital content is constantly and rapidly changing. It is essentially fluid. It is difficult to identify an authoritative *status quo* nowadays. At best we have the current, but always provisional state of affairs.⁷⁴ This suggests a certain non-binding character.

In stark contrast to this, democratic (and constitutional) culture is characterised by slowness, constancy, its binding nature and protection of trust. It needs time to incorporate interests into long-term processes, to balance them and to find compromises.⁷⁵ Once the decisions have been made, they are translated into law. Law is the most important instrument of democratic societies to ensure binding force and permanence. Law should create order and at the same time stabilise state and social orders.⁷⁶

⁷³This term is based on Samuel Huntington's *clash of civilisations*, which he introduced into the international discussion in 1996, albeit in a somewhat different context. For details, see Huntington (1996).

⁷⁴A typical example from practice is *Wikipedia*. For detailed information on Wiki technology and Wikipedia, see Schlieker and Lehmann (2005), p. 253 ff., Pentzoldt et al. (2007), p. 63 ff. and Möller (2005), p. 166 ff.

⁷⁵For an extensive, differentiated account, see Merkel and Schäfer (2015), p. 199 f.

⁷⁶For details on this function of order and conservation of the law, see Rütters (1999), marginal no. 75 ff. and Reh binder (2014), marginal no. 106 f. with further citations.

The *clash of cultures* will have repercussions. What—and this is the exciting question—will be the impact of the confrontation of democracy and law with the logic of digital acceleration?

5.5.2 *Democracy's Speed Dilemma*

The gap between slow democracy and the increasingly accelerated social and economic world is widening. Democracy and the lived world are desynchronised.⁷⁷ Its confrontation with the logic of digital acceleration forces the law to walk a difficult tightrope.⁷⁸ How can or must it deal with the acceleration pressure to which it is exposed?

Democracy faces a dilemma—the speed dilemma. If it opens itself up too much to digital acceleration, it loses its function. Participation, representation, rational decision-making processes and consensus-building take time.⁷⁹ If democracy is accelerated too much, it will no longer be a parliamentary democracy, but a government of a few networked experts from business and administration.

On the other hand: democracy also cannot completely ignore or fend off the pressure for speed emanating from digitalisation processes. In that case, its rules and decisions would generally arrive too late, would be ineffective—and then ultimately irrelevant. To some extent, this can already be observed in some areas. In high-tech policy—for example in stem cell research, cloning or Internet issues—laws are often overtaken by social reality when they are enacted.⁸⁰ The result is that the functions of the law could then be transferred to other areas that provide the corresponding services to society more quickly. One example of this is the new *Lex Mercatoria*, which has become significant in global trade—and continues to gain in importance. Because state laws and courts do not (or cannot or do not want to) meet the needs of the international economy, the private economy creates its own law and its own private jurisdiction.⁸¹ State laws have lost their importance.

⁷⁷ Laux and Rosa (2009), p. 550.

⁷⁸ For detailed information on the impact of the “high-speed economy” on global legal culture, see Scheuerman (2001), p. 103 ff. with further citations.

⁷⁹ Merkel and Schäfer (2015), p. 199 f.

⁸⁰ Similarly, Rosa (2005), p. 409.

⁸¹ Scheuerman (2001), p. 111 describes the connection between the “high-speed economy” and the emergence of private conflict resolution mechanisms: “High-Speed Dispute Resolution.”

5.6 Overloaded: Classical Democracy

The main goal of democracy is to legitimise and control political rule. Democracy knows different ways of legitimising and controlling power. There is not *one true form of democracy*. Based on this insight, which is also empirically underpinned, it is possible to think of ways in which new forms of democracy could emerge in the digital world. However, the classic form of democracy is proving to be increasingly overloaded. There is certainly no way around an *overhaul of democracy* in the medium and long term.

5.6.1 Mechanistic: The Classical Conception of Democracy

Over decades of jurisprudence, the German Federal Constitutional Court has substantiated and modified the democratic principle of popular sovereignty through its *case law on the chain of legitimation*. According to its established case law, state action is only democratically legitimated if an unbroken chain of legitimation connects the people with the state institutions through their elected representatives.⁸²

This concerns the direct and indirect control of state behaviour by parliament. The classical instruments of legitimation and control are parliamentary law,⁸³ parliamentary control of the government and the capability of the higher authorities⁸⁴ to supervise⁸⁵ and issue instructions. The legitimation chain concept of Federal Constitutional Court presupposes clear limits and clear competences and areas of responsibility. After all, without clarity through demarcation, specific state acts by specific officials are difficult to trace back to specific parliamentary decisions and thus to the will of the people.

Behind this conception of democracy is the classical—the Newtonian—world view of mechanics⁸⁶ with its clear causal chains and determined effects. According to this idea, democracy is a sophisticated *machine for decision-making*.

However, it is precisely these clear decision-making connections that are lost in the digitalised world. The diffuse, unclear, cross-border networks in which decisions are prepared and made no longer permit decision-making powers and responsibilities to be clearly assigned. Especially in transnational networks, people who are not legitimised by the German electorate are *per se* involved in decisions. German laws,

⁸²BVerfGE 38, 258, 271; 47, 253, 272; 77, 1, 40; 83, 60, 73; 93, 37, 67. For a highly critical account of this case law, see Ossenbühl (2003), p. 115 ff.

⁸³On the prominent, albeit not unlimited, control function of the law, see Dreier (1991), p. 160 ff. with further citations.

⁸⁴Dreier (1998), marginal no. 107. For details, see Schmidt-Aßmann (1991), p. 357 ff.

⁸⁵For details of the function of supervision in the democratic control of the administration, see Dreier (1991), p. 287 ff. with further citations.

⁸⁶On this world view, see Liening (2009), p. 97 f. with further citations.

powers of German authorities to supervise and issue instructions—the classic control instruments of substantive democratic legitimation—are also largely ineffective in the new decision-making structures.⁸⁷ Mechanistic democracy will no longer function in the digitalised world. The challenge is to develop new ideas of democracy. They need to be more pluralistic, pragmatic and dynamic.⁸⁸

5.6.2 *Alternatives? Beyond Mechanical Democracy*

History tells us that democracy does not necessarily have to be understood in a classical mechanistic way. New and different, equally democratic procedures and decision-making rules are conceivable.⁸⁹

What might such new forms of democracy look like beyond the mechanical model? An empirical view of modern democracy provides some answers. In Western parliamentary democracies, state power is legitimised in various forms.⁹⁰

An empirical look shows us that even decisions beyond majority voting are widespread in democracies. This is partly to do with *efficiency*: technocratic institutions can develop and implement policies at lower decision-making costs than the directly democratically legitimised parliaments.⁹¹ The issue is often to do with political *psychology*. Delegation to technocratic units has become a common tool for legislators to shift responsibility and avoid criticism of policy failure.⁹² If a policy fails, the criticism is not directed against the elected representatives, but against the experts and technocrats.

However, a *structural feature* of democracy should be of particular importance. In a democracy, rule is only exercised for a limited period of time in limited legislative periods. This leads to problems in the conception and implementation of long-term policies. Any policy approach or legal act may be amended or repealed by amended majorities. The consequences are credibility problems and increasing deficits in political confidence. Technocratic institutions are largely independent of these time constraints. Their decisions are therefore not *per se* subject to amendment. The delegation of decisions to expert institutions can therefore be seen as an attempt by politicians to create confidence in the continuity of policy and to regain

⁸⁷The classic model of democratic legitimacy is also reaching its limits in other areas. For detailed information on this set of issues, see Hoffmann-Riem (1997), p. 434 ff. with further citations.

⁸⁸Mitchell (2008), p. 22 f. calls for this in general in terms of new epistemological methods in science. However, this can also be applied to the theory of democracy.

⁸⁹Similarly, Abromeit (2002), p. 143.

⁹⁰Scharpf (1998), p. 168; Scharpf (2000), p. 256 f. with further citations.

⁹¹On the efficiency thesis, see Majone (1998), p. 16 with further citations.

⁹²For details of this “blame-avoidance” mechanism, see Fiorina (1982), p. 47 with examples.

credibility.⁹³ It is not unusual for *pragmatic* reasons to be decisive when forms of legitimation beyond the classical majority voting are used. In modern, complex, highly specialised and multifaceted networked states, for example, parliament cannot control and monitor all areas of the administration with the same intensity. This is why complementary forms of administrative self-regulation have developed in modern industrialised countries,⁹⁴ without which efficient administration would not be possible.⁹⁵

One example are the politically independent central banks in some countries of the European Union. It is precisely their independence that prevents them from being influenced by politics in the form of majority decisions. The central banks are nevertheless controlled—not directly democratically, but technocratically: by bankers and economists who observe them critically and criticise them publicly.⁹⁶ The same applies to the European Court of Justice.⁹⁷ The German Federal Constitutional Court is an important example of supervision and the associated technical-political legitimacy of professional expert discourse from a German perspective.⁹⁸ Its judicial independence, which is guaranteed by Article 97 of the German Basic Law, means that there is no democratically legitimised and ongoing control of constitutional jurisprudence.⁹⁹ Nevertheless, it is controlled—by its embedding in the system of constitutional institutions and by an ongoing communication process involving other courts and jurisprudence. Other examples where political power is exercised without ongoing democratic control are universities and colleges and other public institutions. Comparable manifestations of this phenomenon can also be found in other Western democratic states.¹⁰⁰

Another example: there is a special legitimation mechanism in the Internet community: the *rough consensus*.¹⁰¹ It is based on the idea that consensus can be a model of legitimation. Originally developed by the Internet Engineering Task

⁹³See Majone (1998), p. 17 f., who explains the transfer of national sovereignty to the EC in that context. The idea can, however, be generalised beyond the European sphere.

⁹⁴The term was coined by Groß (1999), p. 194.

⁹⁵For detailed information, see Groß (1999), p. 194 ff. with further citations.

⁹⁶Gormley and de Haan (1996), p. 106.

⁹⁷Scharpf (2004), p. 449.

⁹⁸Another example in this context would be the French Constitutional Council. See Helms (2005), p. 402 with further citations.

⁹⁹In contrast, the German *Federal Constitutional Court* is indeed democratically legitimised. After all, the judges are elected by the Bundestag (lower chamber) and Bundesrat (upper chamber) with a majority in accordance with Article 94 of the German Basic Law. For an account of the unsatisfactory democratic practice of the election of judges, however, see Boehme-Neßler (2001), p. 375 with further citations.

¹⁰⁰Examples from America are described by Scharpf (1998), p. 156.

¹⁰¹For details, see Ahlert (2003), p. 55 ff. with further citations and Froomkin (2003), p. 788 ff. with further citations.

Force (IETF),¹⁰² the key working group for the development of technical standards on the Internet, the procedure has developed into an important decision-making method for other bodies as well.¹⁰³ The most important instrument are the mailing lists of the various expert working groups.¹⁰⁴ They are discussed using established Codes of Conduct in Requests for Comments (RFC)¹⁰⁵ until a rough consensus¹⁰⁶ has been reached. Its content is then regarded as a binding and legitimate decision. The discussions are potentially open to everyone globally.

5.6.3 Democracy: Is the Result All That Matters?

Democracy can be understood as rule by the people and at the same time as rule for the people.¹⁰⁷ Rule *by* the people emphasises the input-oriented perspective of decision-making: political decisions are democratically legitimate if and because they reflect the will of the people.¹⁰⁸ This is the classic idea of parliamentary democracy. Participation and majority voting are the key factors. In contrast, the more recent output-oriented democratic legitimacy focuses on the outcome of political decision-making.¹⁰⁹ Irrespective of whether and how citizens participated in the decision-making process, a political outcome according to this concept is democratically legitimised if and because it brought about an effective solution to the problem in the public interest.¹¹⁰ Rule *not by* the people, but *for* the people.¹¹¹

This is based on a fundamental theoretical consideration: governments are not chosen as an end in themselves. They are elected to promote the common good and solve problems. A democracy not only wants democratically elected, but also efficient governments. In democratic states, too, there is a *connection between legitimacy and efficiency*. This connection between effective problem-solving and democracy can also be proven historically and empirically. The establishment and

¹⁰²Details of the organisational structure can be found in RFC 2028, available at <http://w2ww.ietf.org/rfc/rfc2028> (28/8/2019).

¹⁰³Ahlert (2003), p. 55 f. with further citations.

¹⁰⁴See RFC 1718 of the IETF, p. 5, www.ietf.org/rfc/rfc1718.txt (28/8/2019).

¹⁰⁵On the origin and significance of RFCs, see Hafner and Lyon (2000), p. 166 f. and RFC 1718 of the IETF, www.ietf.org/rfc/rfc1718.txt (28/8/2019).

¹⁰⁶The *rough consensus* is not unanimous, but clearly more than a mere majority decision. This term cannot really be defined more precisely.

¹⁰⁷Scharpf (1999), p. 16.

¹⁰⁸Scharpf (1999), p. 16.

¹⁰⁹Scharpf (1999), p. 16.

¹¹⁰Scharpf (1999), p. 22. Similarly, Nye (2001), p. 6.

¹¹¹Highly critical of this concept are Abromeit (2001), p. 16 ff. and Brunkhorst (2002), p. 540 f., who describes this concept—unnecessarily polemically—as “sham democracy, lazy magic, ideology”. Scharpf (1999), p. 29 ff., explores the limits of this concept of democracy using the example of the European Union.

expansion of an effective welfare state, for example, was an important factor in the emergence of modern states and democracies.¹¹² Conversely: democratic systems have often been destabilised by their economic and socio-political failures.¹¹³ The most impressive example from a German perspective is the Weimar Republic.¹¹⁴

These *technocratic concepts of democracy*¹¹⁵ are based on institutional norms and incentive mechanisms that are required to serve two potentially contradictory purposes simultaneously: on the one hand, they are intended to prevent the abuse of public power and, on the other, to enable effective solutions to problems in the interests of the common good.¹¹⁶ The decision-making process is achieved through agreement by negotiation in which, depending on the situation, deliberation or horse-trading take precedence. The prerequisites¹¹⁷ for such mechanisms to work are twofold¹¹⁸: fairness and reciprocity. How both are achieved remains open and is left to the dynamics of negotiation. Output-oriented, technocratic concepts of democracy are highly flexible¹¹⁹ and thus open up wide scope for the construction of innovative democratic legitimisation mechanisms.

A prime example of an output-oriented legitimisation mechanism is the principle of separation of powers. In addition to controlling power, which has receded into the background, its aim is to distribute state tasks efficiently among the state institutions. In other words: each state organ should perform the task for which it is best suited from the point of view of its organisation.¹²⁰ That is not a speciality of the German constitution. The same applies to different, equally sophisticated systems of checks and balances in other modern states.¹²¹ To put it more succinctly, the efficiency with which tasks are carried out is thus used to legitimise the assumption of tasks. This is nothing other than the basic idea of the output-oriented technocratic conception of democracy.

¹¹²Majone (1998), p. 13, who speaks of legitimacy through social policy.

¹¹³Papadopoulos (2004), p. 225.

¹¹⁴For details, see Winkler (1994), pp. 244 ff., 408 ff.

¹¹⁵In relation to the EU, Kohler-Koch (2004), p. 434 speaks of technocratic legitimacy, which she contrasts with parliamentary legitimacy.

¹¹⁶Scharpf (1999), p. 22. Papadopoulos (2004), p. 226 ff. with further citations, develops criteria with which the effectiveness and quality of policy can be measured.

¹¹⁷Similarly, Kohler-Koch (2004), p. 434 f. with further citations.

¹¹⁸Kohler-Koch (2004), p. 434, on the special technocratic legitimacy of EU decisions. However, this can be applied to all non-majoritarian decision-making systems.

¹¹⁹Similarly, Abromeit (2001), p. 159.

¹²⁰BVerfGE 68, 1, 86, says, "...that state decisions are taken as correctly as possible...".

¹²¹For details, see Scharpf (1999), p. 23.

5.6.4 Conclusion: Level of Legitimacy Instead of Chain of Legitimation

The German Basic Law is concerned with the sovereignty of the people.¹²² How this principle is put into practice is not prescribed in detail by the German constitution.¹²³ The German Federal Constitutional Court bases its “case law on the chain of legitimation” on the classical parliamentary model of democracy.¹²⁴ According to this, democratic legitimacy is only imparted by the national parliament. This premise requires an actual link between the people, parliament and state action: an unbroken chain of legitimation.

However, this interpretation of Article 20 (2) sentence 1 of the German Basic Law is not the only possible one.¹²⁵ For the Basic Law itself knows forms of democratic legitimation that are not mediated by parliament.¹²⁶ It also accepts forms of legitimation as democratic which cannot be traced back to the people, but to the self-administration—local or functional¹²⁷—of the people in question.¹²⁸ Examples include local self-government, universities, social insurance institutions and professional chambers. The various forms of autonomous legitimation show that the Basic Law has not devoted itself to producing a scheme for ideas of legitimation.¹²⁹

There is a further point of view: the Basic Law is internationally oriented and open to intensive transnational cooperation. Article 23 and Article 24 of the Basic Law, in particular, show that the Basic Law also enables and seeks extensive international and supranational cooperation. In that case, democratic legitimation through uninterrupted chains of legitimation cannot be the only legitimation model. For it is precisely in international cooperation that government action can no longer be clearly traced back—in an unbroken chain—to the German people.

Thus, the Basic Law does not depend on the *form* of democratic legitimacy, but on the *level of legitimacy*. The Federal Constitutional Court—to an extent in contradiction to its chain-of-legitimation doctrine—also repeatedly stresses this.¹³⁰

¹²²For details on the different dimensions of popular sovereignty, see Morlok (2001), p. 565 ff. with further citations.

¹²³Similarly, Emde (1991), p. 327.

¹²⁴Schmidt-Aßmann (2004), p. 89, actually speaks of the classical model in this context.

¹²⁵Bull (1998), p. 252, describes the model of democratic chains of legitimation—pointedly but factually correctly—as the “original product of German constitutional law and the BVerfG”.

¹²⁶Schmidt-Aßmann (2004), p. 94.

¹²⁷For details on the democratic legitimacy of functional self-government, see Kluth (1997), p. 369 ff.; Ossenbühl (2003), p. 104 ff. with further citations.

¹²⁸Hofmann and Treier (1989), marginal no. 18 ff. with further citations; Dreier (1991), p. 276 f. with further citations. The German Federal Constitutional Court, NVwZ 2003, 974, 976, expressly accepts alternative forms of legitimation for indirect state administration.

¹²⁹The Federal Constitutional Court has now also emphasised this: BVerfG NVwZ 2003, 974, 975.

¹³⁰BVerfGE 83, 60, 72; 89, 155, 182; 93, 37, 67.

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Chapter 6

Complexity Management: Reinventing Democracy



Democracy is currently being reinvented. This is a necessary process that is closely and inseparably linked to the ongoing digitalisation of the world. It is unlikely to be stopped. At the same time, it is not a force of nature. There is room for manoeuvre that can and must be used politically.

6.1 *Breathing Democracy in the Digital Age*

The world is becoming more and more complex. Globalisation and digitalisation are just two drivers of this development. Increasing complexity is a challenge for all areas of the modern world. This applies equally and especially to the democratic system. Is the classical democratic political system still able to fulfil its functions in a more complex world? That is doubtful. The symptoms of excessive strains on classical democracy are increasing. The more complex the world becomes, the more complex and flexible the democratic system needs to become. Maybe we are on our way to a *breathing democracy*.

Digitalisation is placing special demands on democracy, which needs to become more boundless, faster and more complex. Otherwise it is too remote from the boundless, fast and complex digitalised world. At the same time, however, it must remain stable and protect fundamental freedoms and values. Otherwise it loses its meaning: democracy is not an end in itself. Extreme flexibility and reliable stability—how can these both be achieved at the same time?

A model of democracy that consists of two basic elements is the ideal solution. A *stable core* secures what is absolutely indispensable in a democracy. This can be described as *crystalline democracy*. A range of different elements coalesce around this core—as a *flexible shell*—in ever-changing combinations, depending on what is currently necessary to achieve democratic legitimacy in specific individual cases. This is the *fluid aspect* of democracy.

This dual construction facilitates the form that democracy requires in the digital age: fixed principles and fast and highly flexible elements and processes that can cope with the speed and permanent change of digitalisation. In other words: the stable core secures the essence of democracy. The flexible shell makes democracy compatible with the digitalised environment. This model will be described here as a *breathing democracy*. It does not follow mechanistically fixed rules and specifications. It consistently re-adapts—essentially breathing—to the requirements of the environment. Wherever necessary, deep, intensive and time-consuming democratic discussions are conducted and decisions made. If circumstances dictate, things happen very quickly and “unbureaucratically”. That is compatible with modern, complex democracy theory.¹ Government action is regarded as democratically legitimate if—among other things—it grants all citizens concerned equal opportunities to participate in decision-making processes.² This allows citizens to express their interests in an authentic manner. How this is organised and structured in specific cases will vary. A possible model, one that makes sense in the historical context, is (was) parliamentarism. In the digitalised world, however, this model is—at least in part—outdated. It needs to be complemented by other innovative forms of democratic legitimacy.

6.2 On the Way to a *Breathing Democracy*?

As flexible as a *breathing democracy* can be in specific individual cases, it must not degenerate into undemocratic arbitrariness. There are minimum standards of democracy that must never be fallen short of.

6.2.1 *Minimum Standards of Democracy*

It is not easy to identify the indispensable elements of democracy. There are basically two methods available to do so: an empirical examination of existing and functioning democracies and a normative-theoretical³ interpretation of the concept of democracy.

The *empirical theory of democracy* is geared towards, and determines quasi statistically, which abstract principles shape the nation states that are regarded as

¹For details on the complex theories of democracy, see Schmidt (2000), p. 294 ff.

²However, Böckenförde (2004), marginal no. 27.

³On the etymological interpretation of the concept of democracy, to which the teleological interpretation naturally refers, see Sartori (1997), p. 29 ff. with further citations.

democracies.⁴ This is not least about the difficult question of how to measure the democratic character of political systems in the first place.⁵ Empirically and quantitatively oriented research techniques also attempt to make forecasts about the democratic development of individual states on the basis of their collected data and to develop democratisation strategies.⁶ Well-known examples of this are the democracy measurements and democracy indices of *Freedom House*⁷ and the Bertelsmann Foundation.⁸ Irrespective of the considerable differences that the empirical theories of democracy exhibit on detailed inspection, participation is the main focus for them.⁹ That means that free and equal citizens have participation rights in political decisions as far as possible.¹⁰

The qualitatively oriented *normative theory of democracy* takes a different path: it examines the purpose of democracy and derives the minimum democratic standard from it. The answer to the question of the purpose of democracy ultimately depends on the political-philosophical perspective. According to a widespread interpretation, democracy is about the *freedom* of the individual. Political rule is therefore self-rule, self-government, self-legislation.¹¹ Another, similarly influential view emphasises *reason*: democratic procedures based on a public sphere,¹² competition and approval offer the best guarantee for optimal policy results, i.e. correct, good or fair laws.¹³ However, the view that democracy has certain intellectual and educational prerequisites, such as a developed school system, is wrong.¹⁴ It is normatively unsubstantiated and empirically unprovable.

As different as the individual methods are, the results to which they lead are similar. At the core of democracy¹⁵ are the majority principle, a minimum of “a sense of us”,¹⁶ far-reaching freedoms and a wide range of opportunities for participation. All other democratic characteristics that democracies (may) exhibit in detail can be derived from this.

⁴Lauth (2008), p. 36 ff. gives an overview of the methods. Pioneering here are Vanhanen (1992), p. 22 f. and Vanhanen (1997), p. 27 f.

⁵Vanhanen (1997), p. 55 ff., has developed a democratisation index that allows a systematic global comparison. For details of the sophisticated “New Index of Democracy (NID)”, see Lauth (2008), p. 39 ff.

⁶Vanhanen (1992), p. 157 ff.

⁷For details, see Pickel and Pickel (2006), p. 209 ff. with further citations.

⁸Also, Pickel and Pickel (2006), p. 231 ff. with further citations.

⁹Abromeit (2002), p. 71, with further citations.

¹⁰For details on how effective participation opportunities are measured by empirical democracy theory, see Schmidt (2000), p. 390 ff. with further citations.

¹¹Abromeit (2002), p. 113., is pointed in this regard.

¹²On the function of the public in democracy, see Gerhards (2000), p. 287 with further citations.

¹³Abromeit (2002), p. 113.

¹⁴For an emphatic approach, see Böckenförde (2004), marginal no. 67 f. with further citations, who completely ignores modern democracy theory and empirical democracy research.

¹⁵For a basic account, see Dahl (1998), p. 38 ff.

¹⁶See Gabriel (2008), p. 184 f. with further citations.

6.2.2 *Majority Instead of Truth: Democratic Wisdom*

The classical means of legitimation and control in democracy is majority voting: where there is no consensus, the decision is entrusted to the majority.¹⁷ Majority instead of truth—this is one of the pragmatic¹⁸ basic ideas on which parliamentary democracy is based.¹⁹ This represents a key difference to totalitarian or authoritarian regimes: they search for the “truth”, however that may be defined.²⁰

Democracies recognise that there cannot be *one* truth in liberal and pluralistic modern societies. If one starts from this premise, majority voting is very practicable from the perspective of the theory of decision-making.²¹ Otherwise, it is difficult to integrate the different interests and orientations of will in a mass democracy into a uniform popular will that is binding on the state.

As self-evident as majority legitimacy may be in modern democracy, it is also highly problematic.²² Because, of course, the majority can be wrong.²³ Nevertheless, the outvoted part of the population must submit to the decision taken against their will. A potential risk of majority voting is the *tyranny of the majority*.²⁴ Especially in differentiated and fragmented societies, this is not easy to legitimate. Not least for this reason, majority voting is only practiced in modern Western democracies under strict conditions and within strict limits.²⁵ Majority voting is limited from three sides: it is subject to ethical-cultural, social and constitutional boundaries.²⁶

In order to protect the losing minority from abuse of majority voting, effective protection of minorities is an essential component of democracy.²⁷ This is the only way to strengthen citizens’ confidence in the judgement and goodwill of their fellow citizens.²⁸ For this reason, (constitutional) law restricts the possibilities of the majority to lord it over the minority. Only in that case can the outvoted minority be confident that the majority will not use its position to impose intolerable burdens

¹⁷For details, see Hofmann and Treier (1989), marginal no. 49 ff. with further citations.

¹⁸On pragmatism as the basis of the majority principle, see Hofmann and Treier (1989), marginal no. 49.

¹⁹However, majority voting—as its long pre-democratic tradition shows—is not necessarily linked to democracy. See Dreier (1986), p. 94 ff. with further citations.

²⁰Lübbe (2004), p. 144.

²¹On the efficiency of majority voting, see Sartori (1997), p. 224 ff.

²²Abromeit (2002), p. 141, with further citations.

²³Rhinow (1984), p. 184.

²⁴Tocqueville (1835/1986), p. 287ff, already deals critically with the negative consequences of majority voting using the example of American democracy. He speaks pointedly of the “omnipotence of the majority”.

²⁵Morlok (2001), p. 561 f. with further citations.

²⁶Lijphart (1991), p. 484 with further citations.

²⁷For a clear perspective on this, see BVerfGE 70, 324, 363 ff. On the political-philosophical justification of the protection of minorities in democracy, see Applbaum (2002), p. 21 ff.

²⁸For details of horizontal trust, which is necessary for the functioning of democracy, see Offe (2001), p. 241 ff. with further citations.

on the minority.²⁹ The majority principle always also means minority principle, and that is only a superficial paradox.³⁰ The means of protecting minorities in Western democracies include basic rights³¹ and the rights of the opposition.³² The strongest protection of minorities is the fundamental revisibility³³ of democratic decisions.³⁴ In a democracy, the majority can, in principle, change at any time in regular elections.³⁵ The minority always has the chance to become the majority itself and then make new, different decisions. This is an important incentive for the minority to remain “in the democratic game”.

Protection of minorities through revisibility—this mechanism, however, reaches its limits when decisions are taken that cannot be changed for practical reasons, or can barely be changed at all. Examples include decisions about large-scale technical facilities, military and armaments policy decisions or fundamental decisions in social security systems. Above all, national debt and nuclear technology are areas in which decisions are made that are difficult to reverse and that will have a negative impact on the future.³⁶

6.2.3 *Demos and Democracy: The Psychological Factor*

Effective protection of minorities is a necessary but far from sufficient condition for a functioning democracy. An additional psychological factor is of elementary importance. The necessary preconditions for the democratic legitimacy of the majority principle are an “us identity”³⁷ that enables the losing minority to understand majority voting not as foreign rule, but as collective self-determination.³⁸ Majority and minority must see each other as a *demos*.³⁹

²⁹Abromeit (2002), p. 142.

³⁰Rhinow (1984), p. 255.

³¹For details, see Gusy (1981), p. 349 f.

³²On the rights of the opposition in parliament, see Stein and Frank (2004), p. 93 f.; von Beyme (2004), p. 278 ff.

³³However, reversing legislative decisions cannot mean eliminating all practical consequences. Effects that have already occurred in the past can often no longer be revised. At the same time, a new course for the future can be set. For details, see Hofmann and Treier (1989), marginal no. 58 with further citations.

³⁴See Zürn (1998), p. 241 f., with further citations.

³⁵For details of the importance of elections for democracy, see Morlok (2001), p. 568.

³⁶For details, see Henseler (1983), p. 497 ff. with further citations.

³⁷Kielmansegg (1996), p. 55 ff. Haltern (1998), p. 608 aptly speaks of a necessary sense of belonging to a community.

³⁸Scharpf (2000), p. 270 ff.

³⁹Hurrelmann (2003), p. 669, stresses that stable democratic systems are not possible without a *demos* based on basic common ideas.

Ideally, such an “*us identity*” is rooted in the common political culture.⁴⁰ It may, but need not, be ethnically based.⁴¹ The classical concept in the past has been ethnic homogeneity: the agreement of people, nation and state safeguards the common identity.⁴² Nationalism also played an important role in the democratisation process of the Eastern European states after 1990.⁴³ The concept is obviously outdated,⁴⁴ given the far-reaching processes of the dissolution of boundaries and increasing global migration flows.⁴⁵ It can now also be empirically established that its importance is declining.⁴⁶

Of course, a collective identity can—and increasingly must—also be based on other ideas. There are successful models of democracy that consciously accept ethnic diversity.⁴⁷ One example of this is American patriotism, which specifically has no ethnic basis.⁴⁸ A metaphysical or ethnic concept of the national population is also alien to the German Basic Law. A German concept for a non-ethnically founded basis for a collective identity is constitutional patriotism⁴⁹: a loyalty of all citizens to the constitution and the common political culture.⁵⁰

In the meantime, a common identity is beginning to develop at the European level that is based not on ethnic but on European principles. Since 1992, a stable majority of EU citizens no longer see themselves primarily as citizens of a Member State, but as European or European *and* national citizens in equal measure.⁵¹ Citizenship of the European Union is in any case an example of the fact that “citizenship” does not necessarily have to be linked to a nation state.⁵² In view of the catastrophes caused

⁴⁰Similar here is the concept of the overarching consensus by Rawls (1992), p. 285: despite all the differences in the world views of the citizens, there must be an overlap, an overarching consensus.

⁴¹Scharpf (1998), p. 155. Kirchhof (1991), p. 13f; Huber (1992), p. 349 ff; Di Fabio (1993), p. 202 ff, who regard a homogeneous (state) people as a prerequisite for democracy, fail to recognise this. The German Federal Constitutional Court is also strongly in favour of this view: BVerfGE 83, 37, 50 f.; 83, 60, 71; 89, 155, 182 f. Weiler (1996), p. 100, rightly points to the roots of this opinion in pre-democratic, nationalist-nativist state thinking.

⁴²Gosewinkel (1998), p. 125 ff. with further citations.

⁴³Schulze (1994), p. 335 and Macków (2005), p. 423.

⁴⁴For detailed information on the “crisis of the classical concept”, see Nassehi and Schroer (1999), p. 104 ff.

⁴⁵For detailed information on the dimensions and types of global migration flows, see Opitz (2001), p. 262 ff.

⁴⁶Soysal (1991), p. 1 ff., 164 ff. Similarly, Gosewinkel (1998), p. 134.

⁴⁷See also Weiler (1996), p. 128 ff.

⁴⁸For more details, see Taylor (2002), p. 15 f.

⁴⁹The term was coined by Sternberger (1990), p. 17 ff, especially p. 30.

⁵⁰Habermas (1996), p. 262f.

⁵¹Trüdinger (2008), p. 229 with further citations. Gellner and Glatzmeier (2005), p. 12 f. interpret similar figures from a previous survey too restrictively. It is no longer the case—as they claim—that national identities are dominant in most Member States.

⁵²See also Trüdinger (2008), p. 229. Art. 17 para. 1 sentence 2 Treaty on the European Union (TEU) can only restrict this thesis, but not refute it. Although EU citizenship is still linked to the nationality of a Member State, it is an additional, new legal institution which goes beyond national citizenship.

by nationalism—not only, but especially in the twentieth century—this is a reassuring insight: there is no necessary connection between nationalism and democracy.

6.2.4 *Equality and Freedom: Cornerstones of Democracy*

Since the beginning of democracy in Athens, equality has been at its foundation.⁵³ All citizens—at least in theory—have an equal claim to participation in government and the exercise of political power.⁵⁴ Social origin and status, wealth, education or special expertise do not provide *formal*⁵⁵ prerogatives for democratic discussion and participation. If and because every citizen has equal political rights, he or she always has the opportunity to belong to the ruling majority. Political equality means that rule in a democracy is only ever temporary, not permanent.

Another cornerstone of democracy is freedom.⁵⁶ Freedom in democracy is first and foremost the freedom of the majority: those who belong to the majority have the freedom to enforce their decision. Democratic freedom therefore means freedom of design: in principle, citizens have the freedom to shape their own political and social order.⁵⁷ In order to protect the losing minority from abuse of majority voting, effective protection of minorities is an essential component of democracy.⁵⁸ In a democracy, therefore, not only is the majority's freedom of choice important, but also the freedom of the defeated minority. If the minority does not enjoy a minimum level of protection, it will sooner or later no longer abide by the democratic rules of the game. Then democratic freedom as a whole is in danger. Not least for this reason, the minority must be protected by a system of fundamental and human rights that

On the innovation potential of European citizenship, see Preuß (1998), p. 22 ff. with further citations.

⁵³On the special significance of the idea of equality for democracy, see Tocqueville (1835/1986), p. 581 ff. On the fundamental significance of equality for Athenian democracy, see Bleicken (1995), p. 338 ff.

⁵⁴It is obvious that this ideal has only been realised to a limited extent in political practice. On the reasons for this using the example of political communication, see Peters (1994), p. 52 ff. with further citations.

⁵⁵However, social characteristics affect the actual chances of democratic participation. See Peters (1994), p. 46, who rightly derives from this the normative requirement to neutralise such influences in the democratic public as far as possible.

⁵⁶In epistemological terms, the postulate of freedom and equality as the basis of democracy goes back to Aristotle. See Böckenförde (2004), marginal no. 35 ff. with further citations.

⁵⁷Similarly, Böckenförde (2004), marginal no. 38, who speaks of the “availability of the political and legal order”.

⁵⁸A clear position here is BVerfGE 70, 324, 363 ff.—Geheimdienstkontrolle. On the political-philosophical justification of the protection of minorities in democracy, see Applbaum (2002), p. 21 f.

cannot be abolished by the majority.⁵⁹ In short: in order to protect the freedom of the minority, the freedom of the majority must therefore be restricted.

6.2.5 *Trust: The Underestimated Factor*

There is a close connection between democracy and trust.⁶⁰ Contemporary political theory regards trust as a central prerequisite of democracy.⁶¹ This is hardly surprising. Democracy is a cooperative manifestation of the state and rule, and trust is the social and psychological phenomenon that makes cooperation possible, or at least facilitates it.⁶²

For administrations or governments to be able to work, they need the—vertical—trust of the citizens.⁶³ If they do not get that, costs arise: persuasion on the part of the administration will be necessary and information costs for the citizens will be incurred.⁶⁴ Therefore, democratic administrations need to win and maintain the trust of their citizens. However, that is not enough: a democracy also requires horizontal trust between citizens.⁶⁵ Without a minimum level of trust in the political judgement and integrity of one's fellow citizens, it is difficult to bow to majority decisions.

How can trust be created in democracy? The appropriate means are inclusion and transparency: through these, citizens should develop confidence in political decisions.⁶⁶

The core element of all concepts of democracy is a fundamental congruence between those who are affected by a decision and those who have made the decision.⁶⁷ In other words: democracy is about inclusion to a large extent.⁶⁸ Inclusion has an objective and a subjective side. Objectively, citizens must actually be involved in political decision-making. The subjective aspect is more important still: citizens must *feel* that they are involved in self-government.⁶⁹ Only then will they actually participate and have trust. The objective and subjective aspects of inclusion are linked: without objective inclusion, the feeling of being involved in self-

⁵⁹On the protection of minorities through fundamental rights, see Stein and Frank (2004), p. 59.

⁶⁰Taylor (2002), art. 32 f.

⁶¹Schaal (2004), p. 153.

⁶²On trust as a prerequisite for cooperation, see Gambetta (2001), p. 211 ff. with further citations.

⁶³See Gabriel (2008), p. 185.

⁶⁴Schaal (2004), p. 168.

⁶⁵Offe (2001), p. 263; Taylor (2002), p. 32. Therefore, a minimum level of mutual respect is an important factor of democracy. Taylor (2002), p. 26, is correct in this regard.

⁶⁶This is stressed by Abromeit (2002), p. 172.

⁶⁷Zürn (1998), p. 237.

⁶⁸For a fundamental account, see Dahl (1989), p. 119 ff.; Taylor (2002), p. 30.

⁶⁹Similarly, Gabriel (2008), p. 185.

government vanishes. This also reduces democratic commitment and trust in the democratic system. This is an important cause of disenchantment with politics. When the feeling of widespread political powerlessness spreads, citizens turn away from politics and the democratic system.

How is inclusion achieved in democracy? The means of choice is participation. Democracy is inconceivable without extensive rights of citizens to have their say and to make decisions. However, there are considerable differences—both normatively and in practice—in the degree of participation—conceivable or practised. Direct-deliberative democracy models allow considerably more opportunities for participation and demand more participatory commitment than classical representative democracy. In practice, however, they are rare.⁷⁰

Transparency is an indispensable element of democracy⁷¹ because both participation and the protection of minorities require transparency. Citizens only participate in or monitor politics when they know and can see what is happening. Transparency refers to the outcome and the process that led to that outcome.⁷² Transparency and openness also strengthen citizens' confidence in incumbents and fellow citizens.⁷³ In modern mass democracy, transparency is created primarily by the mass media: they create a public sphere that enables the individual citizen to participate in or monitor politics.⁷⁴

6.2.6 Breathing Democracy: *Wide Scope for Shaping Democracy*

Democracy requires a minimum standard of opportunities for participation and minority protection that can be ensured through transparency and publicity. In practice, there are many different models of how these *democratic essentials* can be fulfilled.⁷⁵ Whether an organisation is democratic, however, does not depend on how these standards can be implemented in detail. What matters is *that* they are

⁷⁰An exception to this rule is the Swiss Federal Constitution, which contains numerous plebiscitary popular rights. See Rhinow (1984), p. 199 ff. with further citations.

⁷¹Not least for this reason, a public arena also established itself with democracy in classical Athens. See Bleicken (1995), p. 422 ff.

⁷²Given the importance that a procedure has for the result, BVerfGE 89, 155, 185 rightly emphasises this.

⁷³For details on vertical and horizontal trust in democracy, see Offe (2001), p. 241 ff. with extensive citations.

⁷⁴The close connection between the mass media and the public can already be seen in the history of this development: the development of public opinion in Europe since the seventeenth century has been closely intertwined with the development of the press. For details, see Habermas (1962/1990), p. 105 f.; 275 ff. with further citations.

⁷⁵An idea of the range of possibilities is provided by the extensive empirical comparisons of democracy that are now carried out on a regular basis. An impressive example is Vanhanen

implemented. This is the starting point for an answer to the question of how democracy can be realised in the digitalised and globalised—i.e. unbounded—world. Democratic minimalism leaves room for the development of more complex, innovative concepts of democracy detached from the state. In a nutshell: a system must be transparent, include all citizens and offer a wide range of opportunities for participation. Then it can be described as democratic—regardless of how it is constructed in detail.

Classical democracy as a “mechanical democracy machine” is coming to an end. It can no longer cope with the structural and disruptive changes associated with digitalisation. That does not necessarily mean that the democratic era is over. However, new, creative and highly flexible forms of democracy need to develop. Then the *era of breathing democracy* can commence in the digital age.

6.3 *Crystalline Democracy: The Stable Core*

Democracy is not an end in itself. Ultimately, its aim is to realise human dignity and human rights in the political process. This stable—quasi crystalline—core of democracy must be firmly established, otherwise democracy becomes a pointless “glass bead game”. The crystalline core of democracy also includes the legal order and the organisation of the state.

6.3.1 *Human Dignity and Human Rights*

The principle of democracy is concerned with human dignity and human rights.⁷⁶ The core of human dignity is that every human being is a subject and enjoys freedom and autonomy. He or she must not be degraded to an object by the state or his or her fellow citizens. No one shall have complete control over him or her. To implement this postulate politically takes us straight to democracy. For in democracy every citizen is basically an equal subject.

In bold terms: human dignity is the philosophical-political idea, democracy the corresponding political practice. The core of human dignity is freedom and equality. Both are difficult to realise outside of democratic forms of rule. Ultimately, democracy is necessary to translate human dignity and human rights into political

(1992, 1997). Schmidt (2000), p. 309 ff. with further citations, provides an overview from the perspective of comparative democracy research.

⁷⁶Beetham (1998), p. 59, with further citations; Habermas (1992), p. 109 ff.; Fox (1992), p. 595 with further citations. For details on various facets of this context, see Beetham (1999), p. 89 ff. with further citations.

practice.⁷⁷ In other words: there is an inescapable connection between human dignity and the sovereignty of the people.⁷⁸

As clear as this connection may seem at first glance, this view is not entirely undisputed. The claim to the universality of human rights⁷⁹ and democracy, which follows from the basis of human dignity, is contradicted by the demand for the recognition of cultural differences.⁸⁰ Are human dignity, human rights and democracy universal ideas that can claim global validity? This is the basic position of the universalists, which is also reflected in Article 1 of the UN Universal Declaration of Human Rights.⁸¹ Can anthropological arguments about the nature of man even be posited independently of cultural differences?⁸² Or are moral values and political ideas never universal, but always anchored in a particular cultural context? This is the core thesis of cultural relativism.⁸³ African⁸⁴ and Asian⁸⁵ voices in particular criticise human rights as a Western construct that is incompatible with other traditions outside the West.⁸⁶

This is not a purely academic theoretical discussion. The answer to the question of the universality of human dignity, human rights and democracy has direct political consequences that extend into people's everyday lives.⁸⁷ The example of human

⁷⁷Similarly, Fox (1992), p. 595 with further citations. Cohen and Sabel (1997), p. 319 f. with further citations, also argue in this direction.

⁷⁸Maus (1999), p. 287, with reference to Rousseau and Kant.

⁷⁹On the claim to the universality of human rights from the perspective of legal philosophy, see Koller (1999), p. 228 ff. with further citations, and Höffe (1994), p. 21 ff.

⁸⁰Shinada (2004), p. 476.

⁸¹See Bretherton (1998), p. 262 ff. with further citations; Faßbender (2003), p. 13 f. with further citations. Hutter (2003), p. 104 f., is fully committed to the universalism position with arguments from the practice of human rights work.

⁸²Brown (2004), p. 251 ff. with further citations, argues in this direction. Similarly Hutter (2003), p. 108 f., who regards the idea of human rights as universal because it is based on experiences of injustice that are felt everywhere, i.e. universally.

⁸³For details, see Bretherton (1998), p. 264 ff. with further citations. In this context the thesis that Chinese culture in general and Confucianism in particular know the idea of human dignity is very interesting. This diametrically contradicts the current opinion that in Asia human rights—as individual rights—are a cultural “foreign body”. For detailed information, see Roetz (1998), p. 37 ff., in particular p. 55 with further citations.

⁸⁴See for instance Ake (1987), p. 5. Similarly also Mbaya (1999), p. 316 ff., who points to differences between the human rights concept and the African tradition and “African humanism”.

⁸⁵As an example only, see Ghai (1994), p. 1 ff.

⁸⁶For a highly critical account of this argument, see Hutter (2003), p. 104 ff. with further citations.

⁸⁷One example is the low level of ratification of UN agreements on individual rights in Southeast Asia. See Bretherton (1998), p. 261 f., with further citations.

rights in China makes this clear.⁸⁸ The question of democracy in Islamic and African states also has deep roots here.⁸⁹

Empirically, however, a close connection between human rights and democracy can be discerned. States that can be described as democracies are generally also states (governed by the rule of law) that respect human rights.⁹⁰ And conversely: autocracies usually have problems with the recognition and/or practical implementation of human rights.

6.3.2 *The Human Right to Democracy*

An incipient human right to democracy is beginning to develop.⁹¹ Democracy is no longer “merely” a moral or political goal. It is becoming a legally binding obligation under international law.⁹² No human right to democracy is explicitly found in international law. On the contrary: international law has traditionally been shaped more by excluding individuals’ participative rights.⁹³ Yet, all the essential building blocks of democracy are contained in different norms of international law, so that combining them produces people’s right to democracy.⁹⁴

The first fundamental building block is a people’s right to self-determination.⁹⁵ It states that “all peoples have the right freely to determine, without external interference, their political status and to pursue their economic, social and cultural development”.⁹⁶ This ancient⁹⁷ right, guaranteed by international law, is essentially

⁸⁸For details on the question of whether individual human rights can be reconciled with the Confucian culture in China—and other Southeast Asian states—see Roetz (1998), p. 37 ff. with further citations and Kühnhardt (1991), p. 193 ff. with further citations. The problem also becomes virulent in the question of the relationship between Confucianism and democracy. See also Paul (1998), p. 57 ff. with further citations.

⁸⁹For overview, see Kühnhardt (1991), p. 142 ff. with further citations.

⁹⁰Habermas (1992), p. 124. The classification of all states in the world into the categories democracy or autocracy in Schmidt (2000), p. 254 ff. is instructive here.

⁹¹Franck (1992), p. 46; Hobe (1999), p. 274. For detailed information on this development process, see Franck (1995), p. 85 ff. Hobe and Kimminich (2004), p. 398 with further citations, are more sceptical. Ipsen (2004), p. 430 ff. with further citations, give an overview of the discussion.

⁹²Franck (1992), p. 47., is emphatic here. Hobe (1999), p. 274 with further citations, describes individual examples of binding democratic obligations in international law.

⁹³For the reasons for this, see Fox (1992), p. 545 with further citations.

⁹⁴This is the convincing argumentation of Franck (1992), p. 52 ff. with further citations.

⁹⁵Franck (1992), p. 52. Franck (1995), p. 91 ff. with further citations. For general information, see Hobe and Kimminich (2004), p. 111 ff. with further citations.

⁹⁶This is the definitive definition in the Friendly Relations Declaration of the UN General Assembly of 24 October 1970, Res. 2625 (XXV).

⁹⁷Franck (1995), p. 92 attributes the right of self-determination to the exodus of the Jewish people from Egypt around 1000 BC. Hobe and Kimminich (2004), p. 111 see the beginning of self-determination only in the nineteenth century. That probably falls short of the mark.

nothing more than the basic idea of democracy: whoever is affected by decisions may participate in the decision-making process.

The free communication of citizens is equally important for democratic structures⁹⁸ because democratic decision-making is based on free communication. In international law, the freedoms of communication necessary for democracy can be found in a whole series of documents and treaties.⁹⁹ Articles 19 and 20 of the 1948 *Universal Declaration of Human Rights* guarantee freedom of expression and information as well as freedom of assembly and association. These rights are reinforced by the legally binding *International Covenant on Civil and Political Rights* (ICCPR) of 1966.¹⁰⁰ Art. 18 f. guarantees the typical and necessary elements of a functioning democracy: freedom of thought and conscience (Art. 18), freedom of expression (Art. 19), freedom of assembly (Art. 21) and freedom of association (Art. 22). The regulations of the *European Convention on Human Rights* of 1950 correspond to this¹⁰¹; it guarantees freedom of thought and conscience (Art. 9) as well as freedom of opinion (Art. 10) and freedom of assembly and association. Other regional human rights treaties with comparable content are the *American Convention on Human Rights* (ACHR) of 1969¹⁰² and the *African Charter on the Rights of the People and Peoples* of 1981.¹⁰³

The third building block of functioning democracies is the possibility of free elections.¹⁰⁴ The electoral rights of citizens are also contained in many international legal documents.¹⁰⁵ Of particular importance are the almost identical Art. 21 of the *Universal Declaration of Human Rights*, Art. 25 of the ICCPR¹⁰⁶ and Art. 23 of the AHCRC,¹⁰⁷ which postulate the right of all citizens to participate in the shaping of

⁹⁸The Federal Constitutional Court emphasises this again and again. See alone BVerfGE 87, 399, 409; 93, 266, 292. See Dreier (1998), marginal no. 74 with further citations.

⁹⁹For detailed information on discursive rights in international law, see Franck (1995), p. 98 ff. with further citations.

¹⁰⁰BGBI. 1973 II, p. 1534.

¹⁰¹BGBI. 2002 II, p. 1055.

¹⁰²Printed e.g. in *Europäische Grundrechte-Zeitschrift* (EuGRZ) 1980, 435. For general accounts, see Hobe and Kimminich (2004), p. 419 ff. with further citations, and Ipsen (2004), p. 805 f. Kokott (1999), p. 196, points out that the practice of the Inter-American human rights organs is clearly different from that of the ECHR organs. In view of the very different framework conditions, this is hardly surprising.

¹⁰³The text is printed in EuGRZ 1990, p. 348. For details, see Turack (1984), p. 361 ff. with further citations. However, it is very doubtful whether the Charter will have a major impact in practice. See Fox (1992), p. 568; Mbaya (1999), p. 330.

¹⁰⁴Franck (1992), art. 63. For details, see Franck (1995), p. 105 ff. with further citations.

¹⁰⁵An overview of all documents is provided by Franck (1992), p. 63 ff.

¹⁰⁶For details, see Fox (1992), p. 553 with further citations.

¹⁰⁷For details, see Fox (1992), p. 565 ff. with further citations.

public affairs and to participate in democratic elections. Similarly, although less effective in practice, is Art. 13 of the African Charter of Human Rights.¹⁰⁸

Since 1945, this right has also been increasingly demanded in practice; its implementation is increasingly and more effectively monitored and supervised by international organisations.¹⁰⁹ A particularly important example of this is Article 3 of the first Additional Protocol to the European Declaration of Human Rights.¹¹⁰ While the ECHR itself did not contain any democratic rights when it was adopted in 1950, democratic participation rights were incorporated into the European human rights acquis 2 years later by the Additional Protocol.¹¹¹ This addition can also be interpreted as evidence of a “democratisation pressure” to which international law is exposed.

6.3.3 Infrastructure. Democracy Through Law and Institutions

There is a close link between democracy and law. Law can be an important means of implementing democracy. Law in general and the rule of law in particular are reliable suppliers of trust, which democracy needs without question. The rule of law is based on permanence and reliability.¹¹² This can be demonstrated in many facets of the principle of the rule of law.

Legal certainty, for example, is an elementary component of the principle of the rule of law.¹¹³ For the citizens this means protection of trust¹¹⁴: they can rely on the fact that concrete subjective rights are preserved in principle—and at least cannot be withdrawn arbitrarily and without transitional regulations. This is not only, but mainly, about the prohibition of retroactivity for laws.¹¹⁵ Every citizen can be

¹⁰⁸For a highly critical account, see Fox (1992), p. 568, who regards Art. 13 as an “almost entirely useless as an international standard of conduct”. More optimistic about the development of democracy in Africa is Mbaya (1999), p. 336 ff.

¹⁰⁹For detailed information on election monitoring by the UN, see Fox (1992), p. 572 ff. with further citations.

¹¹⁰From 20 March 1952. Printed in BGBl. 2002 II, p. 1072. For details, see Fox (1992), p. 560 ff. with further citations.

¹¹¹Contrary to the strict wording, Article 3 of the 1st Additional Protocol of the ECHR includes an individual right to participation. The European Commission on Human Rights and the European Court of Human Rights have developed this in their case law. On the background of this practice of issuing judgments, see Fox (1992), p. 560.

¹¹²Schulze-Fielitz (1998), marginal no. 134, with further citations.

¹¹³The German Federal Constitutional Court has consistently emphasised this in its case law: BVerfGE 2, 380, 403; 60, 253, 268 f.; 88, 384, 403; 97, 67, 78.

¹¹⁴On the protection of legitimate expectations from the point of view of civil law, see Schäfer and Ott (2005), p. 523 f. with further citations.

¹¹⁵For details, see Schulze-Fielitz (1998), marginal no. 139 ff.

confident that laws will not change retroactively. The requirement of certainty¹¹⁶ and the requirement of clarity,¹¹⁷ as well as the postulate of consistency,¹¹⁸ also serve to build trust. Uncertain, unclearly formulated norms that are potentially contradictory unsettle citizens and prevent them from developing trust in the state and its legal system.

The relationship between law, the rule of law and democracy has repeatedly been the subject of controversies in constitutional law and political philosophy. The extreme view that there is a fundamental contradiction between the rule of law and democracy¹¹⁹ is outdated today. On the contrary, the modern discussion focuses on the close links and overlaps between the rule of law and democracy.

Both principles partly overlap. Above all, parliamentary law and the concept of parliamentary scrutiny reservation and the doctrine of materiality form a “link” between democracy and the rule of law. The law is the central control medium within the rule of law.¹²⁰ However, it is not only the core of the rule of law, it is also the result of the democratic, parliamentary process. The law reflects political decisions, which are then implemented in forms consistent with the rule of law. This connection between the rule of law and democracy is reinforced by the theory of parliamentary scrutiny reservation¹²¹ and the doctrine of materiality of the Federal Constitutional Court.¹²² The decision on essential, politically significant issues of fundamental importance to the general public must be taken by parliament itself and enshrined in a law. This is a direct consequence of the democratic imperative. However, because interventions in fundamental rights are essential,¹²³ the theory of materiality is also an important component of the rule of law. In dogmatic terms, fundamental rights can be understood as components of the substantive principle of the rule of law.¹²⁴

Law needs institutions that (are supposed to) enforce it.¹²⁵ On the one hand, institutions consolidate the *status quo* of the law once it has been achieved—that is their preserving function. When an institution monitors whether legal rules are being observed, the consequential costs for a breach of law are higher. This makes it more likely that legal standards will be complied with.

¹¹⁶For an early, fundamental approach, see BVerfGE 1, 14, 45; 17, 67, 82; 25, 216, 227. For details, see Schulze-Fielitz (1998), marginal no. 117 ff. with further citations.

¹¹⁷For a basic approach, see BVerfGE 5, 25, 31 f.; 8, 274, 302; 22, 330, 346. For details, see Schulze-Fielitz (1998), marginal no. 129, with further citations.

¹¹⁸BVerfGE 98, 106, 118 f.

¹¹⁹Kägi (1978), p. 136 ff. with further citations, as an example.

¹²⁰Schulze-Fielitz (1998), marginal no. 50 with further citations.

¹²¹For details, see Schulze-Fielitz (1998), marginal no. 95 ff. with further citations.

¹²²For basic information, see BVerfGE 33, 125, 158 f.; 33, 303, 333 f., 337, 346. For details, see Schulze-Fielitz (1998), marginal no. 103 ff. with further citations.

¹²³Schulze-Fielitz (1998), marginal no. 105, with further citations.

¹²⁴Schmidt-Aßmann (2004), RD 31, with further citations, who, however, rightly points out that not every single expression of fundamental rights constitutes an essential of the rule of law.

¹²⁵Abbott et al. (2000), p. 415 ff.

However, the impact of institutions is not limited to this. Their dynamic function is to drive forward the development of a legal system. Among other things, institutions have the power to set their own law independently. As a rule, they also have dispute-resolution bodies that dispense justice and thus refine and further develop the existing law. The judiciary is an example of that.

The law and the rule of law therefore provide the trust that democracy urgently needs. Law is therefore essential for democracy. At the same time, there is a tension between legal stabilisation on the one hand and flexibilisation demanded by democracy on the other.¹²⁶ The more a field is legalised, the smaller the scope for democratically legitimised decision-makers. Too much protection of trust through legal norms thus restricts the democratic capacity to act. This is the democratic dilemma of the law: justice and human rights are necessary to enable and secure freedom and democracy. At the same time, legal regulation also has a strong potential to restrict freedom.¹²⁷ The more a society is governed by law, the greater the danger of restrictions on freedom and thus democracy. This dilemma cannot be solved in abstract terms. The point at which legalisation “changes” from securing democracy to restricting freedom can only be determined in concrete individual cases. There must therefore be a finely tuned balance between the rule of law and democracy. The simple formula: the greater rule of law, the less democracy will flourish.

The bottom line can therefore be summed up as follows: without law, digitalised structures will not be democratised. However, the strategy of *democratisation through law* also has clear limits. Legalisation alone will not create democracy in the digitalised world.

6.3.4 Regionalisation. Democracy Through Fragmentation

The dissolution of boundaries and fragmentation of societies diagnosed here are not just a risk for democracy: at the same time, they also offer opportunities for democracy. The softening of national borders also opens up new fields of action for subnational units: cities and municipalities, federal states and regions are only the classic examples of this.¹²⁸ Globalisation and digitalisation are by no means global standardisation and centralisation processes. They are dialectical, above all in the cultural field.¹²⁹ The more global values, ideas, conceptions or brands spread, the

¹²⁶Similarly, Schmidt-Aßmann (2004), marginal no. 81.

¹²⁷Habermas (1981), p. 522 sums up legalisation as “colonisation of the living world”. Voigt (2000), p. 180 f., using the example of scientific freedom.

¹²⁸Münch (1998), p. 408. Critical of this is Wolf (2000), p. 205 f.

¹²⁹See Beck (1997), p. 85, re. globalisation. However, this can also be applied to digitalisation.

more people reflect on their regional and local identity.¹³⁰ This applies to the analogue world—as well as to the digital world, albeit in a modified form.

This development is not limited to the cultural sphere. It has implications for politics. As local identity becomes more important, the importance of local and regional political units also increases. Cities, municipalities, regions and federal states move into the spotlight. Not least because of their transparency, they offer opportunities for democratic, even grassroots, structures and procedures.¹³¹ It is no coincidence that in Germany instruments of direct democracy¹³² can be found much more often at the municipal level¹³³ and in the federal states¹³⁴ than at the federal level.¹³⁵

The theoretical and constitutional democratic potential of regional political units is increasingly being updated in practice. Since the mid-1990s, there has been a real boom in participation at the municipal level.¹³⁶ In addition to formal participation procedures, more and more informal participation opportunities are being installed in cities and municipalities within the framework of concepts such as the local agenda, the social city and city marketing. New participation instruments such as perspective workshops, mediation procedures, planning cells etc. are being tested and applied.¹³⁷ In addition to this potential for democracy, regionalisation tendencies also have a clear cross-border aspect. After all subnational cooperation, detached from the state, no longer has to be based on state borders. In addition to large, institutionalised regional alliances such as the European Community, NATO or multilateral economic associations,¹³⁸ there are also cross-border regional cooperation agreements

¹³⁰The neologism *glocalisation* is used for this in the globalisation debate. See Beck (1997), p. 88 ff.

¹³¹For a euphoric account, see Münch (1998), p. 408. For a sceptical approach, see Wolf (2000), p. 205 f., Schmidt (2000), p. 371 f., and Streeck (1998), p. 27 f., who elaborates the problems of subnational political and social units. They reach the limits of their capabilities in the integration of outsiders and in social solidarity between prosperous and poorer regions. For a basic account of the strengths and weaknesses of direct democracy, see Jung (2005), p. 312 ff. with further citations.

¹³²For a basic account of direct democracy, see Decker (2005), p. 1112 ff. with further citations.

¹³³On direct democracy at the municipal level, see Schmidt (2000), p. 356 ff. with further citations. Details can be found in the articles in Kost (2005), which describe in detail the possibilities of direct democracy at the municipal level in all German *Länder* (federal states).

¹³⁴For details of direct democracy in the German federal states, see Weixner (2006), p. 18 ff.; Weixner (2002), p. 73 ff. with further citations. The articles in Kost (2005) analyse in detail the possibilities of direct democracy in the German federal states' individual constitutions.

¹³⁵Decker (2005), p. 1108, rightly speaks of a "triumphant march of direct democracy in federal states and municipalities". For details on the reasons for this, see Decker (2005), p. 1109 f. with further citations and Schmidt (2000), p. 361 ff.

¹³⁶Bogumil and Holtkamp (2004), who speak of cooperative democracy in this context, and Kost (2006), p. 26. Weixner (2006), p. 22 f., provides a statistical overview of the popular initiatives and petitions for a referendum that will be launched by the end of 2004.

¹³⁷For details, see Bogumil and Holtkamp (2004), p. 151 ff. with further citations.

¹³⁸For details, see Held et al. (1999), p. 74 ff. with further citations.

on a smaller scale. The European regions are an example of this.¹³⁹ It is precisely this cross-border regional cooperation that—as one factor among many—is of great importance for the development of a global democracy. They are an important communication channel in cross-border democratic discourse and thus make an important contribution to transnational networking. However, they must not be overestimated.¹⁴⁰ The increasing interdependence of international politics is shifting decisions to the transnational level. Local and regional politics are also losing influence and steering capabilities as a result. Regionalisation as a democratic tool is therefore only as effective as the political influence of the municipalities and regions.¹⁴¹

6.3.5 Basic Democratic Trust

This can provide a starting point for democratic structures in the digitalised world: citizens must be able to participate. However, their participation rights may look different than those required by conventional, classical ideas. The crucial factor is that the institutional and legal organisation of democracy is capable of creating basic trust in democracy and its values. This is the crystalline core of democracy. Starting with this basic trust, different democratic structures are conceivable. That would be the fluid *part of democracy*.

6.4 Fluid Democracy: The Flexible Shell

The crystalline core of democracy is essential for creating and maintaining basic democratic confidence. The fluid dimension of democracy is equally important. This is what makes democracy compatible with the digitalised world. Fluid democracy is not fixed from the outset. As a form of political communication, it develops from case to case. Its basis is located in the political culture, if and to the extent that that is shaped democratically.

¹³⁹For details, see Oppermann (2005), p. 70 with further citations.

¹⁴⁰Kranenpohl (2006), p. 37.

¹⁴¹The results of a study on the cross-border public in the Southern Palatinate and Northern Alsace are instructive: despite the geographical proximity to the border, the interest of the population in the EU is not stronger than the German average. The mass media therefore seem to be more important than geographical aspects for the development of European communication strands. For details, see Tenscher and Schmidt (2004), p. 212 ff.

6.4.1 *(Political) Communication*

A democratic process is a fundamentally open communication and decision-making process in which and through which a decision is made.¹⁴² The democratic discourse thrives on the ongoing, free, creative conflict of political opinions and ideas.¹⁴³ In parliamentary democracy, it takes place largely in parliaments and their environs.¹⁴⁴

Communication, not the state, is the core of democracy.¹⁴⁵ Above all, the deliberative, discourse-oriented models of democracy see democracy as a specific process of discussion and deliberation.¹⁴⁶ This idea ties in with the original model of democracy, the Athenian *agora* democracy. Democracy in ancient Athens was deeply discursive and deliberative. Decisions were publicly discussed by as many citizens as possible.¹⁴⁷ The basis of this conception of democracy is ultimately the realisation that political activity—not only, but especially in democracy—has always been embedded in social activities and communications.¹⁴⁸

The importance of communication for democracy is also highlighted in the German Basic Law. It is not limited to establishing a parliament and formulating standards for democratic elections in Art. 38 para. 1. Far beyond that, it guarantees specific basic communication rights to which individual citizens are entitled.¹⁴⁹ The German Federal Constitutional Court has picked up these ideas and repeatedly emphasised that media and communication are an indispensable prerequisite for a democratic decision-making process. Article 21 of the Basic Law on political parties can also be read as an expression of the communicative idea of democracy in the constitution.¹⁵⁰ Political parties are—or at least should be—communication-driven organisations that foster the discourse between state and society.

¹⁴²Similarly, Hofmann and Treier (1989), marginal no. 57, with further citations; Dreier (1998), marginal no. 72, with further citations.

¹⁴³Similarly BVerfGE 7, 198, 208; 69, 315, 354 f.; 89, 155, 185.

¹⁴⁴See Ismayr (2001), p. 41 ff., 312 ff. with further citations, for details on the communication function of parliament. The communications of the Bundestag (German lower chamber) is not uncontroversial. For a detailed critique of the articulation and communication skills of the Bundestag, see von Beyme (2004), p. 264 ff. with further citations.

¹⁴⁵Similarly, Fuchs (2004), p. 35, with further citations; Barber (2004), p. 173: “At the heart of strong democracy is talk.” Similarly, Hofmann and Treier (1989), marginal no. 57; Dreier (1998), marginal no. 72 f. with further citations.

¹⁴⁶Fuchs (2004), p. 34 ff. with further citations, provides an overview of the different models of participatory democracy. Habermas (1992), p. 351 f., goes a long way down this road, understanding democracy as an institutionalised discursive process of forming citizens’ opinions and wills. For a critique of these models of democracy, see Papadopoulos (2004), p. 223, with further citations.

¹⁴⁷Fuchs (2004), p. 22 f.

¹⁴⁸Bohman (2002), p. 77.

¹⁴⁹BVerfGE 87, 399, 409; 93, 266, 292.

¹⁵⁰On the communicative democratic function of the political parties, see Morlok (1998), marginal no. 21 ff. with further citations and von Beyme (2004), p. 174 ff. with further citations.

There is therefore a close, almost existential connection between democracy and communication, which is why it makes sense to meet the necessary minimum standards of democracy through communication in the broadest sense. A contribution to democracy can therefore be made by the innumerable discourses that different actors at different levels are permanently engaged in. Because communication can in principle be cross-border, this form of *fluid democracy* can solve a fundamental problem: unlike traditional forms of democracy, it is not tied to the nation state and therefore not limited by national borders. On the basis of this idea, new deliberative forms of democracy can be developed that take into account the manifold processes of digitalisation.¹⁵¹

Fluid democracy is based on communication that is differentiated in many ways. Democracy can therefore be as diverse and creative as human communication is. It takes advantage of the power of communication in the analogue and digital world. However, it also has its weaknesses where communication itself reaches its limits. Communication skills and possibilities depend on different prerequisites and are distributed highly unequally—both individually and socially. This applies not least to access to the public.¹⁵² Unlike classical democracy, fluid democracy therefore does not realise the idea of equality—or at least only to a limited extent.¹⁵³ That is not an argument against fluid forms of democracy *per se*. However, they cannot replace classical forms of democracy: they can merely supplement them.

6.4.2 *Digital Democracy Tool. Networks Without Borders*

Communication is interactive *per se* and requires different actors.¹⁵⁴ Communication processes are therefore naturally—not exclusively, but to a very large extent—shaped by the communication partners.¹⁵⁵ Whether democracy can be realised in the unbounded international system through borderless communication thus depends not least on the actors who are involved and acting.¹⁵⁶ Who are the actors within the borderless democratic discourse? And how do they communicate?

Even if the nation state has lost its leading position: in the foreseeable future, states—and not only the superpower USA—will remain the most important actors in

¹⁵¹ Similarly, using the example of the European Union, Schmalz-Bruns (2002), p. 285, with further citations. For general information on deliberative forms of democracy and their problems, see Wolf (2000), p. 196 ff. with further citations.

¹⁵² On the public in the digital age, see above. Sect. 6.3.2.

¹⁵³ Schmalz-Bruns (2002), p. 278 with further citations speaks of “deliberative inequalities”.

¹⁵⁴ For details about the organisation of human interaction, see Watzlawick et al. (2000), p. 114 ff. with further citations.

¹⁵⁵ For details on the resulting characteristics and disorders of communication from a psychological point of view, see Watzlawick et al. (2000), p. 50 ff. with further citations.

¹⁵⁶ On the significance and typology of actors from a political-theoretical perspective, see Scharpf (2000), p. 95 ff. with further citations.

the national and international system.¹⁵⁷ Increasingly, however, informal, network-like communication relationships have emerged between different functional units of states, complementing “official”—formal diplomatic—communication. They establish close communication relationships that are not limited by spatial boundaries. Fluid democracy in the age of digitalisation is therefore barely conceivable without these networks.

Of particular importance for the structures of *cosmopolitan democracy*¹⁵⁸ are the transnational networks of parliamentarians.¹⁵⁹ Parliamentarians are increasingly working together across borders. Overall, the parliamentary networks contribute to the democratisation of the international system.¹⁶⁰ Even more numerous are executive networks in which national governments cooperate across borders. Other communication networks transcend the boundaries between private and public. This includes classic lobbying, for example, which is gaining in importance. Within this framework, civil society networks—the NGOs—have become increasingly influential.

These networks are rightly viewed critically. They create a grey area in which responsibilities become blurred and democratic legitimisation chains become unclear.¹⁶¹ Transparency has not previously been their defining feature.¹⁶² Seen in isolation, the networks are therefore more of a democratic issue. However, placed in an overarching context, they become part of the solution to the problem of democracy. They can be understood as an important component of fluid democracy. They are a place for a democratic discourse not limited by classical borders—geographical, political, technical.¹⁶³ This is a necessary enhancement—not a substitute—to classical democracy, enabling it to respond to the challenges of digitalisation.

6.4.3 *Political Culture*

Democracy and culture are closely intertwined. Democracy needs special cultural framework conditions that enable it to develop and unfold. And conversely: a democratic political structure also influences society and culture.

¹⁵⁷Kohler-Koch (2000), p. 208. Similarly, Krasner (1988), p. 89 f.

¹⁵⁸For details on this term and the concept behind it, see Held (1995), p. 267 ff.

¹⁵⁹For details, see Slaughter (2004), p. 107 ff. with further citations.

¹⁶⁰For a differentiated account on the impact of the parliamentary networks, see Slaughter (2004), p. 127 ff. with further citations.

¹⁶¹Picciotto (1996), p. 1047, also argues along these lines.

¹⁶²Picciotto (1996), p. 1047 f. with further citations; Nye (2001), p. 5. BVerfGE 89, 155, 185 also stresses the fundamental importance of transparency for democracy.

¹⁶³Above all, Slaughter (2001), p. 365 with further citations; Slaughter (2004), p. 135 ff. with further citations.

Political culture¹⁶⁴ refers to the traditions, opinions, values, beliefs and behaviour of citizens in a society in relation to the state in which they live.¹⁶⁵ In other words, political culture is the subjective, emotional side of a political system. It is of great importance for the stability of a political system. A system is only stable if the political culture and the political institutions correspond in the long term.¹⁶⁶ If political cultures change, so do political systems.

Political culture is a multi-layered mixture of traditions, values, attitudes and participatory acts of citizens living in a political system. Political culture includes political opinions shifting over the short term, longer-term political attitudes as well as fundamental and deeply rooted political and ideological value orientations. However, these aspects alone do not fully account for a country's political culture: political culture also includes the history of a state and the traditions that have influenced the development of political consciousness over time.¹⁶⁷

Given its complexity, it is not surprising that political culture is not static but dynamic. It is not present from the outset, it is learned, practised. Above all: it is constantly changing.¹⁶⁸

6.4.4 *Democratic Political Culture*

Political culture is a value-free concept. Not every political culture is democratic. We can only speak of a *democratic* political culture if certain conditions are met. What ultimately matters that large sections of the population are essentially democratic.¹⁶⁹ This also includes a broad consensus on fundamental democratic self-evident truths.¹⁷⁰

The political upheavals of recent German history have prevented the existence of a fixed political tradition and historical continuity in political institutions in Germany.¹⁷¹ However, there are different elements of tradition that still shape the political and social consciousness—i.e. the political culture—to some extent today. What these traditional legacies have in common is that they were alien to democracy, if not anti-democratic, before 1945.

¹⁶⁴The term was coined by Almond and Verba (1963), p. 13.

¹⁶⁵Sontheimer et al. (2007), p. 165.

¹⁶⁶Pickel and Pickel (2006), p. 76 with further citations. For an earlier basic account, see Almond and Verba (1963), p. 31.

¹⁶⁷Sontheimer et al. (2007), p. 166.

¹⁶⁸Pickel and Pickel (2006), p. 74; by von Beyme (1996), p. 62.

¹⁶⁹For details of the political culture of democracy, see Gabriel (2008), p. 184 ff. with further citations.

¹⁷⁰Pickel and Pickel (2006), p. 274, in this context who speak of “political legitimacy of political systems”.

¹⁷¹Sontheimer et al. (2007), p. 169.

An important line of tradition is the German *belief in the state*, the roots of which lie in absolutism as early as at the time of the religious wars.¹⁷² In Germany, the state was the incarnation of the common good.¹⁷³ Hegel, who elevated the state to the reality of the moral idea, took this to extremes.¹⁷⁴ What impact does this line of tradition have on political culture? Because the statist tradition puts the state at the centre of political thought, it sees potential disruptive factors for an orderly state life within society and its—diverse, even colourful—groupings. This is one of the deeper roots of the anti-party effects in Germany that repeatedly flare up. The reservations to which the democratic, pluralistic system of parties and interest groups was—and still is—exposed in the German population can be explained in the context of this tradition.¹⁷⁵

This *democratic-sceptical element* of the political culture is reinforced by the tradition of German idealism. Political thinking in Germany is repeatedly marked by an irreconcilable opposition between “*Macht und Geist*” (power and spirit). The consequence of this is a tendency to measure political reality against an abstract, theoretical ideal. That has a fatal consequence: “dirty” political reality cannot exist in the presence of the noble ideal. In the worst-case scenario, this leads to disenchantment with politics and withdrawal into the private sphere.¹⁷⁶

Two further characteristics of the German tradition in political culture are closely related to these lines of tradition: many Germans find it difficult to accept the limited and regulated conflict as a means of shaping productive societies.¹⁷⁷ By doing so, they fail to recognise a basic element of the democratic process. This is reinforced by the legalistic style typical of German politics: in Germany, there is a strong tendency to quickly grasp political issues as legal problems and to take them to court, especially the Federal Constitutional Court.¹⁷⁸

Despite all traditions of the authoritarian state, a democratic political culture has now developed in Germany.¹⁷⁹ Empirical studies show that in many respects the attitudes, behaviour and values of German citizens have aligned themselves with the standards in Western democracies.¹⁸⁰ There is broad acceptance of the principle of democracy.¹⁸¹ However, a closer examination of the empirical material shows that

¹⁷²Bergem (2004), p. 40 f. points to the roots of German statism in the Thirty Years War.

¹⁷³Sontheimer et al. (2007), p. 171.

¹⁷⁴Bergem (2004), p. 41.

¹⁷⁵Krell et al. (2012), p. 15. For detailed information, see Wiesendahl (2012), p. 135 ff. with further citations.

¹⁷⁶Sontheimer et al. (2007), p. 172.

¹⁷⁷Sontheimer et al. (2007), p. 173.

¹⁷⁸Rudzio (2015), p. 525; Sontheimer et al. (2007), p. 173.

¹⁷⁹Sontheimer et al. (2007), p. 192.

¹⁸⁰Sontheimer et al. (2007), p. 184.

¹⁸¹Rudzio (2015), p. 514. However, there are clear differences between West and East Germany. See Fuchs and Roller (2004), p. 31 ff.

this general finding needs some differentiation.¹⁸² Even if democracy as an abstract principle is affirmed by the vast majority of citizens, the same citizens may reject it in its concrete form.¹⁸³ There are now numerous disturbing empirical studies that indicate widespread and deep dissatisfaction with the practice of democracy in Germany.¹⁸⁴

Overall, the attitudes of citizens towards the democratic system can be summed up by the following rule of thumb: the more abstract the perspective, the more satisfied the citizens are. And conversely: the more concrete the view of everyday democracy is, the more dissatisfied citizens can be with it. Is this political awareness a reliable guarantor for safeguarding the democratic constitutional order even in times of crisis? Some scepticism is called for.¹⁸⁵

This is exemplified by the differences in citizens' trust in state institutions. As a rule, citizens have less confidence in the political institutions involved in concrete political disputes than in other institutions that are more distant from everyday politics.¹⁸⁶ The courts and police enjoy a much higher level of trust among citizens than parliament and government. Citizens consider parties and politicians to be particularly untrustworthy.¹⁸⁷ However, these are precisely the actors who are at the centre of the political disputes and who (are required to) resolve the conflicts.

Nevertheless, there has been no talk of a deficit in the legitimacy of the political system in Germany so far. This is shown by Europe-wide comparisons that examine citizens' satisfaction with their political system. As a rule, Germans' approval of their institutions is (still) comparatively high.¹⁸⁸

6.4.5 *Digital Democratic Culture*

(Political) culture absorbs impulses from outside and evolves. This will also happen as democratic political culture encounters digital visions and concepts. Where this development is leading cannot, of course, be said. The process is also hard to control. Yet one thing is clear from cultural history: no culture picks up impulses from outside without modifying and integrating them. There is therefore much to suggest that a functioning democratic culture will absorb digital impulses—and

¹⁸²For details, see Gabriel (2008), p. 194 ff. For a highly critical and pessimistic view, see Patzelt (2004), p. 101 ff. with further citations.

¹⁸³See Embacher (2012), p. 71, 86 ff. for an overview of current empirical studies. Fuchs and Roller (2004), p. 35.

¹⁸⁴Embacher (2012), p. 79 ff. with further citations.

¹⁸⁵Sontheimer et al. (2007), p. 174.

¹⁸⁶Gabriel (2008), p. 195.

¹⁸⁷Rudzio (2015), p. 516 f. with further citations.

¹⁸⁸Rudzio (2015), p. 515 with further citations.

democratically modify them in the process. Democratic culture is changing. But it is still democratic.

Is that a realistic prognosis or just naive wishful thinking? That depends on many factors. One key factor are the emotions of the citizens. The role that feelings play in politics can hardly be overestimated. Do citizens have an emotional attachment to democracy? This would greatly impact whether and how digitalisation is democratised. Against this background, the increasingly diffuse disenchantment with politics¹⁸⁹ and politicians is worrying. It is not the same as a general disenchantment with democracy—but it could be a precursor.

6.5 *Bridging the Gap: Time for Democratic Experiments*

How can the old idea of democracy be combined with the new, disruptive ideas and profound changes of the digital world? The dual model of democracy outlined here offers a theoretical solution. The hard core of democracy is reduced to the basic and essential. It must be preserved—regardless of how disruptively the digital environment is changing. Otherwise we would no longer be able to speak of democracy. However, the crystalline core is surrounded by a flexible—or fluid—shell. This blends classic democratic and proven ideas with innovative, completely new digital ideas. It forms the bridge between the old democratic world and the new digital era. This is also the place for creative ideas and democratic experiments. Anything goes—as long as the hard core of democracy is preserved.

In the digitalised and networked world, there is no longer a unified democracy. The world has become too fragmented, unbounded, individualised, complex and interdependent. Nevertheless, democracy can also be realised under the conditions of the digitalised world. In that case, however, it is a more diffuse, more flexible and more confusing multidimensional democracy, which is already emerging in an incipient form. One insight is key. The process of digitalisation is unstoppable. The future is largely digital. Whether it will still be democratic is being decided now. Digitalisation can be shaped politically. Democracy can be reinvented in the digital age. It depends on political will and democratic creativity. The time has come for democratic experiments for, and a new democracy of, the digitalised world.

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¹⁸⁹See also the empirical material in Rudzio (2015), p. 516 f. with further citations.

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